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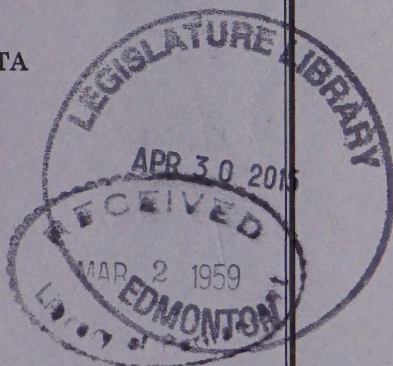


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ANNUAL REPORT *report of*
Vital Stat & Hosp. Div.
OF THE

^{2/}
Department of Public Health

PROVINCE OF ALBERTA

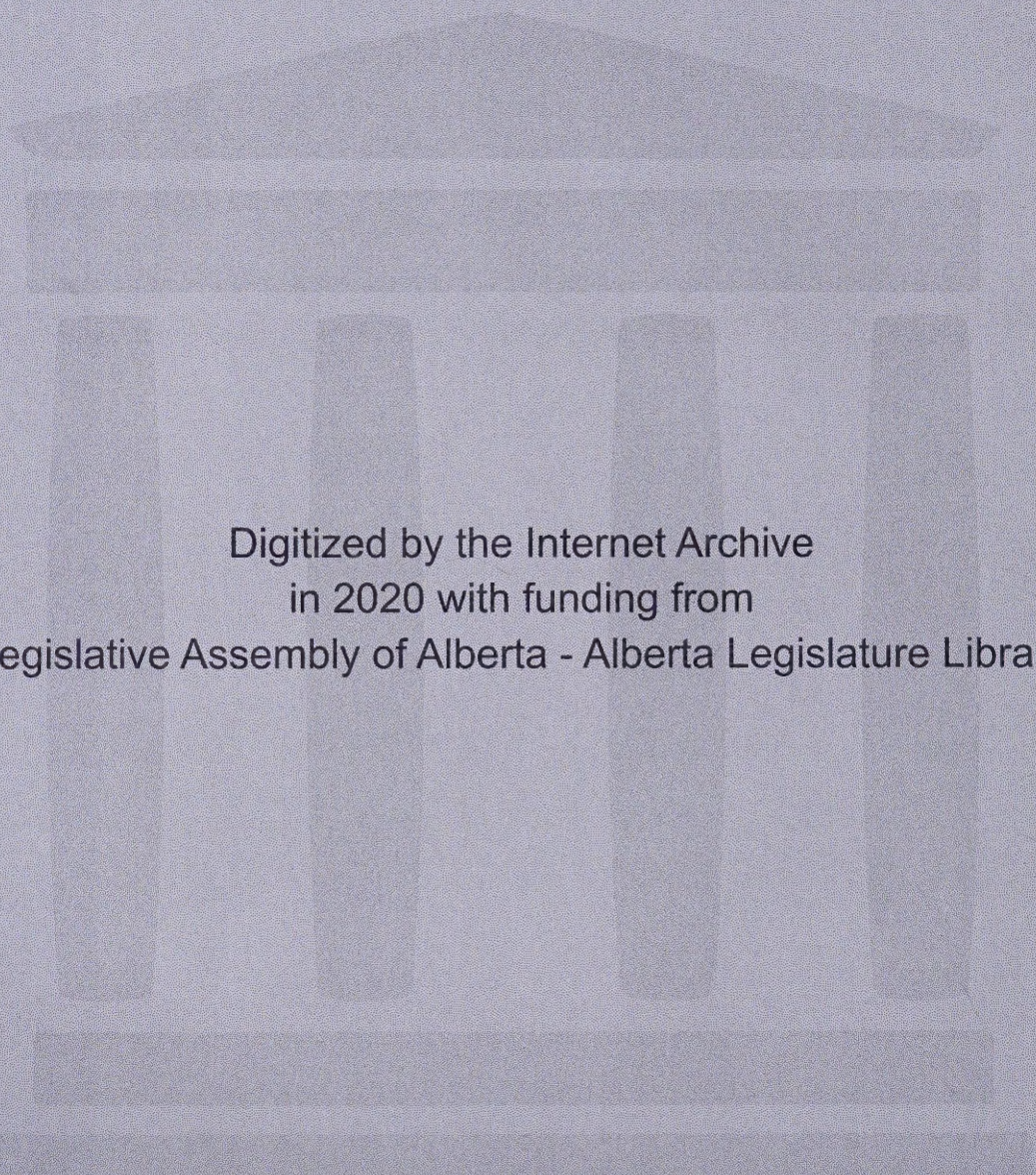
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1957



PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
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1959

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ANNUAL REPORT

OF THE

Department of Public Health

PROVINCE OF ALBERTA

1957

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
PRINTED BY L. S. WALL, QUEEN'S PRINTER
1959

December 31, 1958.

TO HIS HONOUR,

J. J. BOWLEN,

Lieutenant Governor of the Province of Alberta.

SIR:

I have the honour to transmit herewith, the Annual Report of the Department of Public Health for the year 1957.

I have the honour to be, Sir,

Your obedient Servant,

J. DONOVAN ROSS, M.D.

Minister of Health.

December 31, 1958.

TO THE HONOURABLE DR. J. DONOVAN ROSS,
Minister of Health,
Administration Building, Edmonton, Alberta.

SIR:

I have the honour to submit herewith, the Thirty-Ninth
Annual Report of the Department of Public Health.

I have the honour to be, Sir,

Your obedient Servant,
A. SOMERVILLE, B.A., M.D., D.P.H.,
Deputy Minister of Health.

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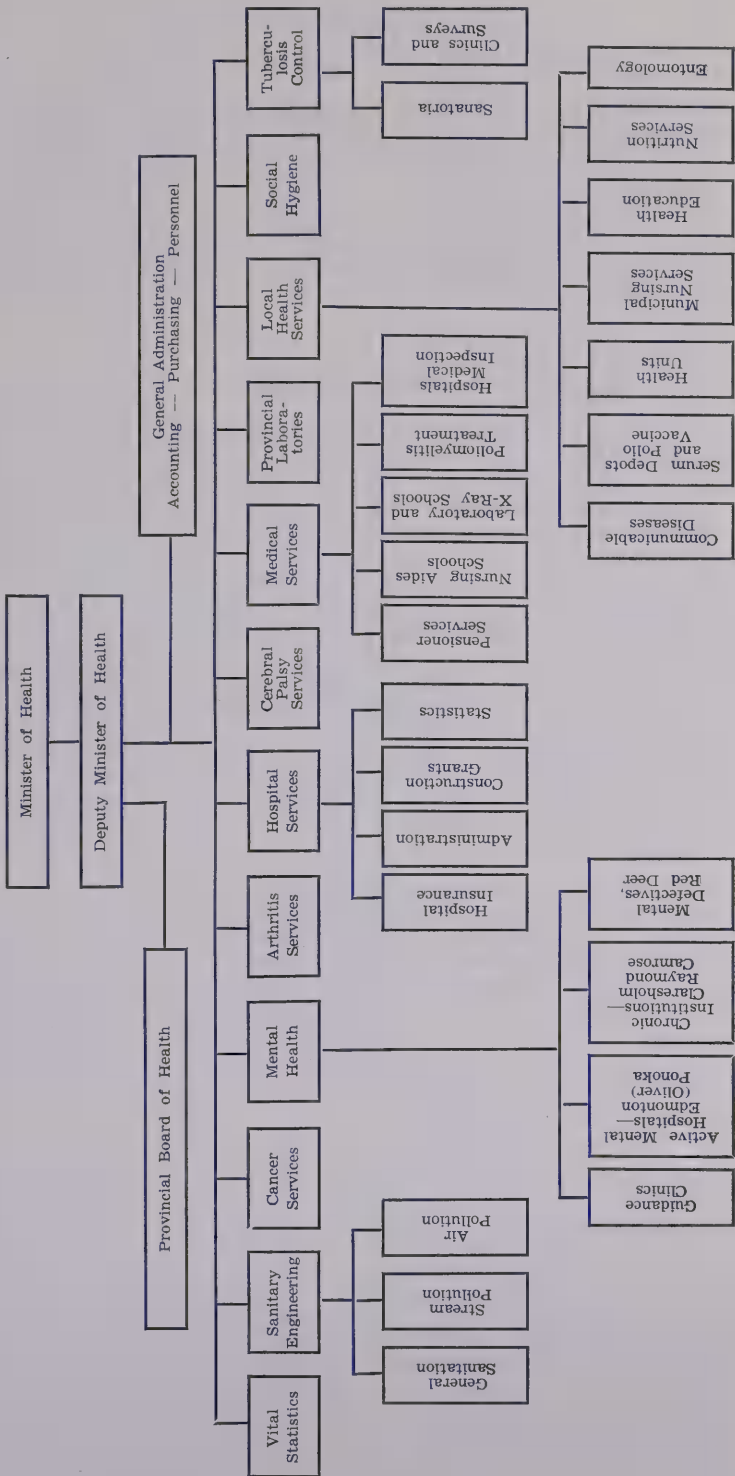
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Department of Public Health—Alberta DIVISIONAL ORGANIZATION CHART January - 1958



PROVINCIAL BOARD OF HEALTH

The Provincial Board of Health met on such occasions as were necessary during the year. A review of some of the major items which received the attention of the Board is contained in this report.

There was no change in membership of the Board during the year. Dr. A. Somerville, Provincial Medical Officer of Health, continued as Chairman, and Dr. R. D. Stuart, Provincial Bacteriologist, and Mr. H. L. Hogge, Provincial Sanitary Engineer, were members.

REGULATIONS PASSED OR AMENDED DURING THE YEAR

O.C. 719-57 approved regulations respecting the fluoridation of water supplies. These regulations became necessary as certain communities approved by-laws under The Public Health Act to add fluorides to their water supplies. The regulations require the submission of plans and specifications to the Provincial Board of Health. They also outline the duties of the operating authority, the controls which are to be applied to the treatment process, the records to be kept and the returns and the reports which are to be submitted to the Provincial Board of Health.

O.C. 1719-57 approved new regulations governing barber shops and beauty culture parlours. These regulations replaced former regulations governing barbers, barber shops and barber training schools. The new regulations are more in keeping with the improved methods and materials now available to these trades. They cover such subjects as customer and attendant hygiene and the sanitary protection of utensils, equipment and supplies.

O.C. 1720-57 approved new regulations governing cemeteries and burial grounds. These replaced former regulations. The new regulations clarify the procedure leading to approval by the Provincial Board of Health of a cemetery location, provide requirements concerning the care of cemeteries, particularly in respect to fences and entrances, and change the minimum required depth to the top of a casket from five feet to three feet. They also bring up to date the rules governing the responsibility for the burial of indigents so that the rules are the same as in various Statutes governing the care of indigents.

O.C. 1722-57 approved amendments to the regulations respecting nuisances and general sanitation. These amendments clarify the responsibility of Local Boards of Health and Municipal Governments in respect to abating a nuisance when the person responsible cannot be found.

O.C. 1723-57 approved an amendment to the regulations governing restaurants. This amendment clarifies the requirements concerning manual dishwashing methods. The regulations had previously required the use of three sinks but had permitted the use of two sinks under certain circumstances until January 1st, 1956. The regulations were amended to delete all references to the use of two sinks.

O.C. 1721-57, 1898-57, 1941-57, 1943-57 and 1944-57 approved amendments to renumber the regulations respecting industrial poisons, the regulations relating to the transportation of dead bodies, the regulations governing the use of hydrocyanic acid gas, the regulations relating to industrial and construction camps and the regulations respecting swimming pools and bathing places. No other changes were made in these regulations. This renumbering was carried out in preparation for the filing of the Provincial Board of Health regulations as required by The Regulations Act.

During the year a few cases of persons who were suffering from tuberculosis in an infectious form and who were refusing treatment were drawn to the attention of the Board. After proper investigation of the cases, the Board issued two orders under the provisions of the communicable disease regulations covering removal of these persons to sanatoria for treatment. This represents a considerable decline in the number of such orders (and conversely a considerable improvement in the conditions making such orders necessary) when compared with the 11 orders issued in 1956 and 17 in 1955.

During the fall of the year health authorities throughout the province co-operated in an inoculation program against Asiatic flu. Priority was given to protection of those engaged in essential services. The program went forward under the general supervision of the Provincial Board of Health.

Sixteen persons were appointed to be Executive Officers of the Provincial Board of Health during the year. These appointees were employees of the Provincial Department of Health or were Municipal Nurses. During the same period 14 cards were returned and at the year's end 37 such authorizations were in effect, there having been 35 at the end of 1956.

During the year 87 nurses who had been appointed by Local Boards of Health to be Executive Officers were issued authorizations by the Provincial Board certifying them to be capable of performing inoculations and vaccinations in accordance with Section 41 of The Public Health Act. Forty-four authorizations were returned and at the year's end 127 were still in effect. Eighty-four had been in effect at the first of the year. In part, the increase follows the extension of health services in the province as it includes nurses appointed to new positions.

The sanitation of the Province's major rivers continued to receive the Board's attention during 1957. There were no spectacular developments in this program during the year as the steps taken in earlier years continued to control the situation. Some attention was directed to the Athabasca River which, during the year, began to receive industrial wastes.

The Board gave attention to possibilities of air pollution in various areas of the Province affected by industrial growth. An increasing number of complaints from the public indicate a growing concern in this.

The foregoing constitutes a brief review of some of the major activities of the Provincial Board of Health during the year.

Amongst other matters receiving the attention of the Board were problems concerning the design of restaurants, the parking of trailer coaches on private land and the marketing of cut-up poultry. In these and other matters the Board gave direction and co-ordinated the activities of the various Divisions of the Department and Local Boards of Health in a broad program to improve the health of the people of the Province.

LEGISLATION PASSED DURING THE YEAR

Health Unit Act Amendment Act (Chapter 27)

This Act amended The Health Unit Act, being chapter 139 of the Revised Statutes of Alberta, 1955.

By an amendment to section 7, clause (b), a member of the board may be paid twelve cents per mile for each mile travelled by car upon approved health unit business.

Section 11, subsection (1) was amended to allow the appointment of an additional full-time nurse when there is a vacancy on the staff of a full-time medical officer, and to permit the employment of part-time stenographer-technicians.

This Act came into force on July 1, 1957.

Hospitalizations Benefits Act (Chapter 30)

This Act is cited as The Hospitalization Benefits Act.

It introduces a new hospitals benefits plan which will replace the plan presently in operation throughout most of the Province.

Hospital benefits under this Act will consist of standard ward hospitalization as defined in a hospital of the person's choice.

This Act comes into force on April 1, 1958.

Hospitals Act Amendment Act (Chapter 31)

This Act amended The Hospitals Act, being chapter 147 of the Revised Statutes of Alberta, 1955.

Sections 7 and 8 were amended to increase the maximum amount for which a local authority is liable for hospital treatment of an indigent person from six hundred dollars to eight hundred dollars per year.

This Act came into force on July 1, 1957.

An Act to Amend an Act to Incorporate Medical Services (Alberta) Incorporated (Chapter 48)

This Act amended An Act to Incorporate Medical Services (Alberta) Incorporated, being chapter 88 of the Statutes of Alberta, 1948, and gives it a short title. Hereafter the Act may be cited as The Medical Services (Alberta) Incorporated Act.

Section 4 was amended by adding a new clause that empowers Alberta Medical Services to enter into reciprocal arrangements with any similar association or body in any other part of

Canada or the United States for the purpose of providing adequate medical care to persons covered by contract with either party.

This Act came into force on April 11, 1957.

Municipal Hospitals Act Amendment Act (Chapter 59)

This Act amended The Municipal Hospitals Act, being chapter 216 of the Revised Statutes of Alberta, 1955.

Section 10 was amended by striking out subsection (3) and substituting subsections (3), (4) and (5) which change the amounts of and the basis for allowances to the provisional board.

Section 60 was amended. Subsection (1) was amended to enlarge the franchise for the election of members of hospital boards previously confined to ratepayers, and will permit the use of municipal voters' lists in compiling the hospital voters' list, as the qualifications are similar.

The following changes were made in connection with the change to section 60. Forms A, B and C in the Schedule were amended to remove from the forms references to persons who would vote not as ratepayers but as the spouse or relative of a ratepayer. Form D in the Schedule was struck out and a new Form D was substituted. Section 55, subsection (2) and section 60, subsection (3), clause (b) were amended to remove the references to either of the declarations set out in Form D as there is now only one declaration in Form D. Section 63 was amended by striking out subsection (4). These amendments will make proprietary electors within the meaning of the municipal Acts the eligible voters upon the establishment of a hospital scheme.

Section 80 was amended to change the amounts of and basis for allowances to the board of a hospital district.

Section 83 was amended by striking out subsections (1), (2) and (3). The substituted provisions will enable the auditor to use standard auditing methods in auditing the records of a hospital district.

This Act came into force on July 1, 1957.

Public Health Act Amendment Act (Chapter 69)

This Act amended The Public Health Act, being chapter 255 of the Revised Statutes of Alberta, 1955.

Section 7, subsection (1) was amended by empowering the Board of Health to make orders and regulations governing the location, construction, maintenance and operations of crematoria and the controlling of radiation hazards.

Section 34 was amended by making the grants available to cities having a population in excess of thirty thousand.

This Act came into force on July 1, 1957.

DEPARTMENT OF PUBLIC HEALTH

DEPARTMENT OF PUBLIC HEALTH

REVENUE AND EXPENDITURE FOR FISCAL YEAR ENDING MARCH 31, 1958

		Salaries	Expenses	Revenue
601	Administration - General	\$ 13,368.67	\$ 898.70	\$
602	Administration - General	75,606.63	4,922.30	1,021.64
618	Administration - Postage		6,398.12	
603	Hospital and Medical Services—			
	Administration	85,179.86	14,716.05	
	Grants and Services		14,870,583.49	45.00
646	Hospital Construction Grants		1,302,088.68	270,356.84
605-1	Communicable Diseases	8,237.44	113,755.36	
605-2	Sanitary Engineering	28,749.44	11,093.21	2,111.40
606	Municipal Nursing	7,635.39	134,402.39	48,298.31
607	Bureau of Vital Statistics	69,466.29	20,318.06	122,206.46
609	Insulin		12,509.55	
610	Social Hygiene	63,317.76	13,779.98	31,097.47
626	Public Health Laboratories		349,079.66	56,079.88
631	Poliomyelitis		643,158.13	
633	Cancer Services	189,863.91	485,492.67	195,053.59
638	Civil Service Nurse	5,874.39	1,980.74	
639	Public Health Education	15,880.83	6,881.25	
640	Entomology	9,326.71	1,792.21	
641	Health Units	10,610.93	667,346.09	249,369.45
643	Nursing Aides Act	27,092.87	73,775.03	206,810.15
645	Health Services - Extension Program	65,510.20	1,523,818.97	1,045,162.32
648	Grants for Public Health Services		73,673.00	
649	Alcoholism Foundation of Alberta		117,000.00	
651	Cerebral Palsy Clinics	54,257.09	25,409.91	38,205.93
652	Arthritis Services	11,862.37	7,998.41	

Division of Mental Health

622	Director's Office and Guidance Clinics	88,436.77	12,391.92	54,850.79
612-1 } 613-2 }	Provincial Mental Institute, Edmonton	1,598,644.49	434,113.65	536,133.41
612-3 } 613-1 }	Provincial Mental Hospital, Ponoka	1,484,670.14	496,285.94	416,590.05
612-4	Provincial Auxiliary Mental Hospital, Claresholm	57,298.05	27,918.18	28,945.95
612-5	Provincial Auxiliary Mental Hospital, Raymond	78,914.56	25,608.87	40,827.17
612-6	Rosehaven, Camrose	469,720.68	125,007.75	295,371.08
614-1	Provincial Training School, Red Deer	848,692.43	252,265.07	205,218.34
614-2	Deerhome, Red Deer	74,184.75	75,274.75	4,217.45

Division of Tuberculosis Control

604-1	Director's Office and Clinics	45,718.56	69,339.21	6,463.54
604-2	Baker Memorial Sanatorium, Calgary	727,287.35	232,245.08	285,720.35
604-3	Aberhart Memorial Sanatorium, Edmonton	711,195.59	180,930.08	191,329.25
		\$ 6,926,554.15	\$22,414,252.46	\$ 4,331,485.82

Total Expenditure—Public Health Department	\$29,340,806.61
Less: Public Health Revenue	4,331,485.82
Net Expenditure—Department of Public Health	\$25,009,320.79

The Vital registrations during the year were as follows:

Births	35,719
Marriages	10,117
Deaths	8,255

The population for 1957 was officially estimated as 1,160,000 and, therefore, the following rates have been recorded:

Year	No. of Births	Birth Rate	No. of Marriages	Marriage Rate	No. of Deaths	Death Rate
1952	29,105	30.0	9,514	9.8	7,345	7.6
1953	31,376	31.3	10,126	10.1	7,646	7.6
1954	33,593	32.3	9,960	9.6	7,520	7.2
1955	34,357	32.2	9,844	9.2	7,956	7.5
1956	34,951	31.1	9,965	8.9	7,786	6.9
1957	35,719	30.8	10,117	8.7	8,255	7.1

On the whole these figures are good. The total number of births is up although the birth rate is down slightly. The natural increase (excess of births over deaths) was 27,464.

Alcoholism

The Alcoholism Foundation of Alberta is a voluntary society supported during the fiscal year 1957-58 by the Province of Alberta by a grant of \$117,000.00. This was approximately 80% of their income.

The Foundation recognizes alcoholism as a treatable illness and a public health responsibility and is, therefore, concerned with problem drinking. Its aim is to prevent problem drinking through education, treatment and research. In carrying out this program 569 persons were treated in 1957, bringing the total treated to 3,082 since the inception of the service, of which 53% are reported as having achieved more or less recovery.

Asiatic Influenza

Early in 1957 a new type of influenza virus was observed in Eastern Asia. Since it was known that short-term protection can be achieved against older strains of influenza by inoculation with a vaccine, it was assumed that this would be true also for this new type. Therefore, the Provinces of Canada, assisted by the Government of Canada, arranged for the large-scale production of this new vaccine.

This vaccine was used in Alberta for the protection of a selected group of workers whose work was considered of great importance to the community. The results of this effort were not clear since the disease reached the Province while the inoculating was being done. A special research project was carried out at the Provincial Mental Institute, Edmonton, where a comparison was obtained between persons inoculated with the Asian Influenza Vaccine and persons inoculated with a "placebo". This experiment showed a fairly high degree of protection from this single dose, at about 60%.

On the whole, the epidemic as it appeared in Alberta was mild and the number of deaths was small. Deaths from influenza and pneumonia in Alberta during 1956 and 1957 were as follows. This relates to about 200,000 cases.

	1956	1957
Influenza	35	135
Pneumonias	326	352

A few deaths were observed where a very virulent staphylococcal pneumonia developed as a complication of influenza.

Hospital Insurance

Hospital Insurance has been under study in Alberta, periodically, for many years. 1956 and 1957 saw a revival of this work due to specific proposals that the Federal Government planned to come into this field with grants-in-aid. The work involved in Alberta planning was so great that effective July 1st, 1957, the former Division of Hospital and Medical Services was split to form a Division of Hospital Services and a Division of Medical Services. Reports from each of these Divisions appears herewith and indicates the service covered under each of the new Divisions.

The Division of Hospital Services is proceeding with the development of a hospital insurance program for Alberta. It is anticipated that this will go into effect early in 1958, whether the Federal Government comes into the picture or not.

Fluoridation

In 1956 The Public Health Act was amended to permit the fluoridation of communal water supplies provided it was approved by a plebiscite at which over two-thirds of those voting, vote in favour. The Town of Fairview gave the necessary authority that fall and the service was to be installed in 1958 as Alberta's first.

In the fall of 1957 the Cities of Red Deer and Grande Prairie voted in favour of the scheme, while votes in the Cities of Edmonton, Calgary, Lethbridge and Medicine Hat failed to obtain the necessary two-thirds majority.

Perinatal Mortality Studies

A special committee of the College of Physicians and Surgeons, using funds provided under the Child and Maternal Health Grant, has continued the study of perinatal deaths. In 1957 this covered 846 deaths, including 397 stillbirths and 449 deaths of infants over 1,000 grams (2 lbs. 3oz.) who died within one week of birth. In addition, there were 116 deaths among babies under 1,000 grams.

This year's report shows a slight decrease in stillbirths which has been offset by an increased number of deaths in the first week, leaving the total perinatal death rate practically level for the past three years. The chief cause of death in both the stillbirths and among those dying in the first week has been prematurity, and during the three years there has been a slight increase in the number of deaths from this cause.

This committee has regularly recommended that premature cases should be transferred to larger hospitals and, if possible, the case should be in the larger hospital before the birth occurs. The statistics show that this recommendation is realistic. It is also recommended that in cases where an exchange transfusion appears likely, that the case should be transferred for delivery to a point where such a transfusion is possible.

It is anticipated that this study will continue.

Change of Minister

In September, 1957, the Honourable Dr. W. W. Cross resigned as Minister of Health after 22 years in that position. After the establishment of the Province in 1905, the health services were under different Ministers—mostly the Minister of Agriculture. From 1919 to 1935 four different Ministers served as Ministers of Health in the newly established Department of Public Health.

At the time of Dr. Cross's retirement, a dinner was put on by the senior members of the Department staff. At this time a paper was read outlining the development of the Department during his term of office in considerable detail. This paper was later published in the February, 1958, issue of the Alberta Medical Bulletin.

In September, 1957, Dr. J. Donovan Ross was appointed Minister. He brings to the position knowledge gained from the private practice of medicine in the City of Edmonton and from an active interest in medical and hospital economics.

Respectfully submitted,

A. SOMERVILLE, B.A., M.D., D.P.H.,
Deputy Minister of Health.

DIVISION OF LOCAL HEALTH SERVICES

E. S. ORFORD SMITH, M.B., D.P.H., *Director*

The Division of Local Health Services includes the following sub-divisions, each under the supervision of its own director:

- (1) Communicable Diseases,
- (2) Health Units,
- (3) Public Health Nursing,
- (4) Health Education,
- (5) Nutrition Services, and
- (6) Entomology.

The services represented in this amalgamation correspond closely, although not completely, with those which are the concern of local health authorities.

The Division offers consultant services to public health workers in the field, and, in collaboration with other Divisions, undertakes the orientation of Medical Officers of Health, Public Health Nurses and Sanitary Inspectors newly appointed to the Province.

The reports which follow provide a more detailed account of the functions and responsibilities of the individual sub-divisions, and of their achievements during 1957.

COMMUNICABLE DISEASES

E. S. ORFORD SMITH, M.B., D.P.H., *Director*

This branch of the Division of Local Health Services is responsible for:

- (1) The collection and transmission of information concerning the morbidity and mortality of communicable diseases;
- (2) The distribution of immunizing antigens and sera;
- (3) Supervision of the utilization of those immunizing agents which are available only in limited quantities, and
- (4) Consultation regarding the interpretation and application of communicable disease regulations.

POLIOMYELITIS

The incidence of poliomyelitis in 1957 was the lowest for twelve years. Only 65 cases were reported, of which 34 were paralytic and 31 non-paralytic. In the absence of confirmation by virus identification, it is quite possible that some of the cases reported as non-paralytic poliomyelitis may actually have been instances of Coxsackie or ECHO virus infection. The continued decline in

the number of polio cases increases our assurance that poliomyelitis vaccine is really effectual.

By August it was found possible to extend the vaccination program to include infants from the age of six months upwards, all pre-school and school children, all expectant mothers, school teachers up to age 40 and parents up to age 40 having children of pre-school age. Finally, in December, a further extension of the program was authorized which enabled local health authorities to offer the vaccine to all persons up to 40 years of age.

TYPHOID FEVER

Sixteen cases of typhoid fever were reported during 1957. Six of these occurred during the early part of the year, and were traced to the consumption of raw river water drawn through the ice from the North Saskatchewan River in the neighbourhood of Buck Creek and Drayton Valley. The only place where the river could have been contaminated by sewage was at Rocky Mountain House, some 70 miles upstream. Oil workers in the area were warned of the danger of drinking river water which had not been chlorinated or boiled, and T.A.B. vaccine was made available to them by the Municipal Nurse at Breton, who served Buck Creek, and by the Stony Plain Health Unit, which was responsible for the Drayton Valley area.

DIPHTHERIA

There were 39 cases of diphtheria in 1957, more than double the number reported during 1956, and the highest on record for eight years. Nearly half of these cases developed in the St. Paul area before the establishment of a Health Unit, and four out of the six deaths, including three in one family, occurred in the same district. Even in the City of Edmonton a mother and two of her children were affected by the disease. These facts emphasize once again the need for achieving and constantly maintaining the highest possible level of immunity among children.

MEASLES

The number of measles cases was 12,337 six times the number reported for 1956. The unusually high morbidity rate has never during the last twenty years been exceeded, and only once, in 1949, nearly equalled. The occurrence of sixteen deaths, moreover, serves as a reminder that this is still one of the more serious diseases of childhood, and one against which the protection of very young or debilitated children should always be regarded as of vital importance.

LEPROSY

Two cases of leprosy were reported during the year, the first since 1953. One of these was a Chinese woman of 51 who had arrived from China three years previously, and who had had signs of the disease for several months. The other was an Ontario-born woman of 58 who had lived in Alberta for 52 years, had never been out of Canada, and who had apparently been infected for many years.

EPIDEMIC INFLUENZA

Four cases of Asiatic influenza were identified during the last two weeks of August. The first of these was an Air Cadet at Olds who had just returned from a trip to Denmark and Germany, two were Boy Scouts returning from a Jamboree in England who showed symptoms upon their arrival at Edmonton Airport, and the fourth was a Girl Guide at Lethbridge who had just arrived home from a camp in Ontario. No secondary cases were reported, and it is possible that the prompt isolation of these four cases may have delayed the appearance of the disease in epidemic form for one or two weeks, although certainly not for longer.

Epidemic outbreaks were first reported among Army personnel at Calgary during the second week of September, and among students of a residential college at Lacombe the following week. Between the middle of September and the middle of November reports of epidemic disease were received from almost every part of Alberta, and estimations of the local incidence varied from 10 per cent to 90 per cent. It is conservatively estimated that about 40 per cent of the total population of the Province was affected by the disease, but the great majority of cases were mild and the case fatality rate was less than one-fortieth of one per cent.

With the object of maintaining essential community services, a monovalent vaccine prepared from the Asiatic influenza virus was distributed to local health authorities for the immunization of persons in specified priority categories. Since the supply of vaccine was small and had to be stretched as far as possible, an intradermal dose of 0.1 c.c. was recommended in place of the subcutaneous dose of 1 c.c. advocated by the Connaught Laboratories. The prior arrival of the epidemic, however, made it impossible to assess the value of the vaccine administered in this manner.

INFLUENZA VACCINE FIELD TRIAL

An evaluation of Asiatic influenza vaccine was successfully undertaken with the assistance of the medical and nursing staff at the Provincial Mental Institute. A special allocation of material for study purposes was arranged by the Epidemiology Division of the Department of National Health and Welfare, and was supplied by the Institute of Microbiology.

Some 1,035 patients participated in the trial. Each received a subcutaneous injection of 1 c.c. of either vaccine or a placebo of similar physical appearance. The two substances were labelled A and B, and their respective identities were known only to the labeller, who did not take part in the conduct of the trial. Inoculations were completed by the end of the first week in October, before any cases of influenza occurred at the hospital, and observation was maintained until the end of the year.

Of the 519 patients who received vaccine, clinical symptoms of influenza were noted in 30, or 5.8 per cent, while of the 516 who received placebo, symptoms were observed in 75, or 14.5 per cent. The incidence of influenza in the vaccinated group was therefore two-fifths or 40 per cent of the incidence in the control

group, from which it is concluded that a single subcutaneous dose of 1 c.c. of vaccine resulted in a protection rate of 60 per cent.

The total cost of biological products provided for the control of communicable diseases was \$314,020.00.

TABLE 1
NUMBER OF CASES OF COMMUNICABLE DISEASES REPORTED IN THE YEARS
1956 and 1957

	1956	1957
Acute Anterior Poliomyelitis	81	65
Diphtheria	19	39
Dysentery	1,109	70
Food Infections	17	14
Leprosy .....	.....	2
Measles	2,047	12,337
Meningitis	2	6
Paratyphoid Fever	7	2
Rocky Mountain Spotted Fever .....	.....	.....
Rubella	994	8,676
Scarlet Fever and Septic Sore Throat	642	774
Smallpox .....	.....	.....
Tetanus .....	.....	1
Tuberculosis—Pulmonary	1,035	1,216*
Tuberculosis—Non-Pulmonary	98	91*
Typhoid Fever	22	16
Trachoma	1	.....
Whooping Cough	547	889
Undulant Fever	1	5

NOTE: *These figures include "inactive" cases.

New active T.B. (pulmonary) cases for 1957—479;
active (non-pulmonary) new cases for 1957— 86.

TABLE 2
DEATHS ASCRIBED TO COMMUNICABLE DISEASES IN THE PROVINCE OF ALBERTA
FOR THE YEARS 1956 AND 1957

	1956		1957	
	Total Deaths	Rate per 100,000 of population	Total Deaths	Rate per 100,000 of population
Acute Anterior Poliomyelitis	3	0.3	6	0.5
Gastroenteritis and Colitis (except Diarrhoea of the Newborn)	64	5.7	59	5.1
Diphtheria	0	0.0	6	0.5
Influenza	35	3.1	135	11.6
Measles	2	0.2	16	1.4
Meningococcal Meningitis	4	0.4	4	0.3
Pneumonia (all forms)	326	29.0	352	30.3
Scarlet Fever and Streptococcal Sore Throat	0	0.0	1	0.1
Smallpox	0	0.0	0	0.0
Tuberculosis (Pulmonary)	36	3.2	60	5.2
Tuberculosis (Other)	7	0.6	8	0.7
Typhoid Fever	1	0.1	2	0.2
Paratyphoid and other Salmonella infections	1	0.1	1	0.1
Undulant Fever (Brucellosis)	1	0.1	0	0.0
Whooping Cough	3	0.3	4	0.3

Population of Alberta
in 1956
1,123,116

Population of Alberta
in 1957
1,160,000

TABLE 3: COMMUNICABLE DISEASE CASES REPORTED IN 1957 BY SEX, AGE AND MONTH OF REPORTING (Continued)

	SEX		MONTHS												AGES					TOTAL		
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Age not stated	
POLIOMYELITIS (PARALYTIC CASES)																						
Edmonton	1	2	...	...	...	...	...	...	...	...	1	2	6	1	...	1	2	2	...	4	...	3
Calgary	4	4	...	...	...	...	...	...	...	...	...	1	6	1	...	1	1	1	...	1	...	8
Urban	7	7	...	1	...	...	...	1	1	...	2	1	1	1	...	...	4	3	1	6	...	14
Rural	6	3	1	2	...	1	...	1	1	...	1	1	...	...	...	...	2	3	1	3	...	9
Total	18	16	1	3	...	1	...	2	2	8	4	10	2	1	...	2	9	8	2	13	...	34
POLIOMYELITIS (NON-PARALYTIC CASES)																						
Edmonton	3	2	...	...	...	...	...	...	2	1	2	...	...	...	...	...	2	2	...	1	...	5
Calgary	8	3	...	1	...	2	...	...	2	2	4	...	...	...	...	...	3	5	...	3	...	11
Urban	4	3	...	...	...	1	...	...	...	5	1	...	...	...	...	...	2	2	1	3	...	7
Rural	6	2	1	...	...	1	...	...	2	3	...	...	1	...	...	...	1	3	2	2	...	8
Total	21	10	1	1	...	4	...	...	6	11	7	...	1	...	...	...	8	12	3	8	...	31
MEASLES																						
Edmonton	1968	2101	122	416	1285	1168	586	240	92	39	20	8	28	65	106	1591	2323	17	28	4	4069	
Calgary	680	649	52	24	42	127	213	293	243	118	41	37	62	77	31	359	911	18	10	...	1329	
Lethbridge	154	134	74	43	3	3	9	...	3	7	8	7	48	83	2	51	231	...	...	...	288	
Urban	1353	1291	200	504	491	211	345	128	98	483	50	49	21	64	90	1073	1300	34	42	...	2644	
Rural	2018	1989	129	389	616	838	633	826	243	60	69	63	61	80	141	1129	2420	68	58	...	4007	
Total	6173	6164	577	1376	2437	2347	1786	1487	679	707	188	164	220	369	370	4203	7185	137	142	300	12,337	

12,337

RUBELLA

Edmonton	592	737	57	107	163	244	338	192	67	26	30	21	31	53	28	234	948	69	48	2	1329
Calgary	980	1192	310	404	523	367	329	141	24	15	2	13	12	32	9	94	1995	52	22	.....	2172
Lethbridge	861	839	46	403	821	309	95	17	3	2	.....	2	2	.....	7	107	1404	133	49	.....	1700
Urban	550	589	42	137	245	210	227	79	51	20	32	19	35	42	53	235	679	84	44	44	1139
Rural	1073	1263	79	362	582	523	376	276	39	25	17	11	10	36	78	384	1609	130	88	47	2336
Total	4056	4620	534	1413	2334	1653	1365	705	184	88	81	66	90	163	175	1054	6635	468	251	93	8676

SCARLET FEVER AND SEPTIC SORE THROAT

Edmonton	84	118	28	33	25	20	14	19	8	7	8	8	13	19	2	57	130	9	4	.....	202
Calgary	67	60	18	27	26	20	5	3	7	3	3	4	6	5	1	22	88	6	10	.....	127
Lethbridge	13	5	9	5	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	6	9	1	2	.....	18
Urban	43	37	5	10	10	13	2	3	2	3	14	1	14	3	1	18	37	2	15	7	80
Rural	186	161	38	29	70	42	23	12	28	2	29	44	15	15	13	78	137	25	51	43	347
Total	393	381	98	104	133	96	44	37	45	15	54	57	49	42	17	181	401	43	82	50	774

TYPHOID FEVER

Edmonton	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	1
Calgary	10	4	2	3	1	3	1	3	1	1	3	1	8	1	14
Rural
Total	12	4	2	4	1	3	1	4	1	2	3	2	8	1	16

TYPHOID FEVER CARRIERS

Calgary	1	1	1	1
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PARATYPHOID "C"

Calgary	2	1	1	1	1	2
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TABLE 3: COMMUNICABLE DISEASE CASES REPORTED IN 1957 BY SEX, AGE AND MONTH OF REPORTING (Continued)

SEX		MONTHS												AGES					TOTAL		
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Age not stated	
Rural		1					1											1			
TETANUS																					
PULMONARY TUBERCULOSIS ACTIVE (NEW CASES)																					
Calgary	24	22	6	2	4	5	4	3	9	3	1	5	2	2		4	5	2	34	1	46
Edmonton	42	33	12	5	7	8	3	8	2	4	4	3	13	6	1	4	4	14	51	1	75
Lethbridge	6	2	1							2			1						8		2
Medicine Hat	1																				2
Urban	45	41	7	11	5	11	1	3	6	4	1	8	11	6		11	11	6	56	2	86
Rural	115	105	22	23	14	14	13	18	12	12	25	9	22	30	4	27	44	24	109	12	220
Refugee	30	12	7	3	1	2	25	1	1	1				1			1	3	38		42
Total	263	216	55	52	31	40	49	37	30	26	40	25	49	45	5	46	65	49	298	16	479
NON-PULMONARY TUBERCULOSIS ACTIVE (NEW CASES)																					
Calgary	5	7	1	1	1	1	2	3		1	1	2	2	1					11	1	12
Edmonton	9	9	1							1	1	3	6	1	1	2	2	1	12		18
Lethbridge																					
Medicine Hat																					
Urban	1	10		1	1	1		6				2				3	1		7	1	11
Rural	18	26	6	7	2	3	2	5	2		4	2	5	6		6	7	3	27	1	44
Refugee																					
Total	33	53	8	8	6	5	4	14	2	2	6	9	13	9	1	11	10	4	57	3	86

DEPARTMENT OF PUBLIC HEALTH

TABLE 4

INCIDENCE OF SOME OF THE MORE SERIOUS COMMUNICABLE DISEASES
FOR THE TEN-YEAR PERIOD, 1948 to 1957

Date	Population	Total Cases	Total Deaths	Mortality Rate per 100,000 of population
DIPHTHERIA				
1948	846,000	52	6	0.7
1949	871,000	59	12	1.4
1950	895,000	13	1	0.1
1951	939,501	2	1	0.1
1952	970,000	11	1	0.1
1953	1,002,000	28	3	0.3
1954	1,039,000	35	2	0.2
1955	1,066,000	10	1	0.1
1956	1,123,116	19	0	0.0
1957	1,160,000	39	6	0.5
TYPHOID FEVER				
1948	846,000	13	0	0.0
1949	871,000	13	1	0.1
1950	895,000	13	1	0.1
1951	939,501	37	0	0.0
1952	970,000	16	2	0.2
1953	1,002,000	9	1	0.1
1954	1,039,000	5	1	0.1
1955	1,066,000	8	2	0.2
1956	1,123,116	22	1	0.1
1957	1,160,000	16	2	0.2
POLIOMYELITIS				
1948	846,000	380	28	3.3
1949	871,000	127	9	1.0
1950	895,000	143	7	0.7
1951	939,501	84	2	0.2
1952	970,000	774	81	8.3
1953	1,002,000	1,399	109	10.9
1954	1,039,000	550	31	3.0
1955	1,066,000	244	8	0.7
1956	1,123,116	81	3	0.3
1957	1,160,000	65	6	0.5
WHOOPIING COUGH				
1948	846,000	1,178	11	1.3
1949	871,000	98	5	0.6
1950	895,000	120	3	0.3
1951	939,501	827	7	0.7
1952	970,000	1,105	8	0.8
1953	1,002,000	1,085	12	1.2
1954	1,039,000	842	7	0.7
1955	1,066,000	791	1	0.1
1956	1,123,116	547	3	0.3
1957	1,160,000	889	4	0.3
SCARLET FEVER				
1948	846,000	248	0	0.0
1949	871,000	865	0	0.0
1950	895,000	2,309	0	0.0
1951	939,501	2,304	6	0.6
1952	970,000	3,829*	2	0.2
1953	1,002,000	2,173*	3	0.3
1954	1,039,000	1,363*	0	0.0
1955	1,066,000	741*	1	0.1
1956	1,123,116	642*	0	0.0
1957	1,160,000	774*	1	0.1
*NOTE: Represents combined total of Scarlet Fever and Streptococcal Sore Throat.				
MEASLES				
1948	846,000	2,086	7	0.8
1949	871,000	9,179	19	2.2
1950	895,000	1,538	8	0.9
1951	939,501	8,204	12	1.3
1952	970,000	3,515	7	0.7
1953	1,002,000	7,260	8	0.8
1954	1,039,000	3,769	6	0.6
1955	1,066,000	7,136	24	2.3
1956	1,123,116	2,047	2	0.2
1957	1,160,000	12,337	16	1.4

HEALTH UNITS

E. S. ORFORD SMITH, M.B., D.P.H., *Director*

The Health Unit Act of 1951 has made it possible for cities with a population of less than 50,000, towns, villages, counties, municipal districts and improvement districts to group together and form a Health Unit. When a Health Unit is thus established, the Department of Public Health pays 60% of the approved operating expenses, while the local contributing authorities are required to provide the remaining 40% in proportion to their population. This arrangement has enabled the majority of municipalities in Alberta to provide themselves with a generalized public health service at a very economical cost.

Responsibility for the detailed administration of each Health Unit rests with the Health Unit Board, which consists of councillors from the major participating municipal bodies. The Division of Local Health Services exercises administrative supervision over Health Units and acts in an advisory capacity to Health Unit Boards.

Two new Health Units were established during 1957. The Edson Health Unit with headquarters at Edson brought much needed services to the oilfields around Drayton Valley and to the new industrial community at Hinton, while the North Eastern Alberta Health Unit with headquarters at St. Paul and sub-offices at Bonnyville and Smoky Lake filled the needs of an important agricultural area. This raised the total number of Health Units to twenty, their names and locations being as follows:

Alberta East Central Health Unit, Stettler.
Athabasca Health Unit, Athabasca.
Barons-Eureka Health Unit, Coaldale.
Chinook Health Unit, Fort Macleod.
Drumheller Health Unit, Drumheller.
Edson Health Unit, Edson.
Foothills Health Unit, High River.
Grande Prairie Health Unit, Grande Prairie.
Jasper Place Health Unit, Jasper Place.
Leduc-Strathcona Health Unit, Edmonton.
Medicine Hat Health Unit, Medicine Hat.
Minburn-Vermilion Health Unit, Vermilion.
Mount View Health Unit, Calgary.
North Eastern Alberta Health Unit, St. Paul.
Peace River Health Unit, Peace River.
Red Deer Health Unit, Red Deer.
Stony Plain-Lac Ste. Anne Health Unit, Stony Plain.
Sturgeon Health Unit, Edmonton.
Vegreville Health Unit, Vegreville.
Wetoka Health Unit, Wetaskiwin.

The services which are normally offered by a Health Unit include the prevention and control of communicable diseases, the local control of tuberculosis, maternal and child health programs, school health services, mental hygiene programs, health education and sanitary inspection services.

In order to provide these services, each Health Unit employs a Medical Officer of Health, a number of Public Health Nurses depending upon the population served, one or more Sanitary Inspectors, one or more Stenographer-Technicians and a part-time Secretary-Treasurer.

A Health Unit is also authorized to provide dental services for children up to age 16 years, and may employ a Dentist and a Dental Assistant for this purpose. Three Health Units had a dental program in operation by the end of the year.

The numbers of personnel which Health Units employed, or were entitled to employ, during 1957 and the two preceding years, are indicated in the following table:

Category	1957	1956	1955
Medical Officers	20	18	17
Dentists	3	1	1
Public Health Nurses	98	82	70
Sanitary Inspectors	26	24	19
Dental Assistants	3	1	1
Stenographer-Technicians	29	25	22
Secretary-Treasurers	20	18	17

A conference of Board Members, Medical Officers of Health and Secretary-Treasurers of Health Units was held in the Department at the end of November, and afforded an opportunity for discussion of their problems. Among the resolutions passed at this conference and presented for the Minister's consideration was a proposal that the existing method of financial support for Health Units be replaced by a block grant system, and a recommendation that free penicillin be made available for the prevention of rheumatic fever in children with a previous history of the disease.

PUBLIC HEALTH NURSING

DOROTHY MCPHAIL, B.Sc., R.N., *Director*

The Public Health Nursing directorate of the Division of Local Health Services deals primarily with the counselling of public health personnel, and the supervision of municipal nurses. An important phase of the work has been the placing of staff in both health units, and municipal nursing stations. Seventeen nurses were appointed to municipal nursing services and twenty nurses were referred for appointment to health units.

Field trips were made by the Director to twenty-four nursing centers and fifteen health units. Several of these areas required two or more visits. The Nursing Director also met with the councils of seven Municipal Districts to discuss matters pertaining to the operation of the nursing services within their municipalities. Fourteen Municipal Nursing Service Societies held local meetings with the Director to discuss their responsibilities in relation to the nursing service.

Early in January 1957 the Fawcett Municipal Nursing Service closed permanently. The nursing district at Milk River was absorbed by the nursing service at Warner following the arrival of a resident doctor at Milk River. The nursing district at Lindale was likewise embodied into the nursing service at Breton, while the Hines Creek Municipal Nursing Service was reopened during the year after medical services in that locality had been discontinued.

Five nurses were granted leave of absence and professional training grants to allow them to register for the course in Public Health Nursing at the University of Alberta.

Out of twenty-nine municipal nursing services there are seven which have not yet been included in health units. Three of these are in the Special Areas, and it may be some years before these areas are ready for health unit services. The other four municipal nursing services, however, are situated in districts which are adjacent to established health units, and which could with advantage be included in these units at any time.

There were four municipal nursing stations vacant on December 31st, 1957, and seven others had been without municipal nursing services for short periods of time during the year. In all these instances the health unit staffs were able to maintain essential public health services.

A Municipal Nursing Service Association has been formed at La Crete in the district of Fort Vermilion, and a Nursing Service Committee was appointed to prepare plans for the building of a nurse's cottage.

New cottages have been built with the assistance of the Department of Municipal Affairs for the Municipal Nursing Services at Peers and Blueberry Mountain.

Staff Education

The Alberta Public Health Nurses were invited to attend the annual spring refresher course which was held in the conference room, Administration Building, Edmonton. The theme of the conference was Maternal and Child Health. Credit for the success of the conference is shared by many of the Senior Health Unit Nurses who gave generously of their time in presenting a series of lectures on Pre Natal Classes.

Eight Senior Health Unit Nurses attended a special ten-day course on Pre Natal Teaching, arranged and offered by the University School of Nursing and the Department of Extension, University of Alberta. Miss Aileen Hogan, Consultant, Maternity Nursing, Maternity Center Association, New York, was the guest lecturer. Several of these nurses have since commenced Pre Natal Classes in their own Health Units. With the aid of federal health grants the Child and Maternal Health Division of the Department of National Health and Welfare have supplied each of the twenty health units with teaching materials and reference books for this worthwhile project.

Lectures on the Services of the Department of Public Health were given by the Director to the Diabetic Association, the students of the Advanced Practical Obstetrics course, and the University of Alberta Public Health Nursing students.

Important visitors to the Province during 1957 were three members of the Department of National Health and Welfare, namely:

1. Miss Dorothy Percy,
Chief Nursing Consultant.
Department of National Health and Welfare.
2. Miss Esther Robertson,
Nursing Consultant.
Child and Maternal Health Division,
Department of National Health and Welfare.
3. Dr. Jean Webb,
Chief, Child and Maternal Health Division,
Department of National Health and Welfare.

The statistical records attached to this report indicate the work accomplished by the municipal nurses throughout the Province.

NUMBER AND TYPES OF CALLS 29 MUNICIPAL NURSING DISTRICTS
(21 I.D.'s)
(8 M.D.'s)

Number Treatment Consultations	26,378
Number Treatment Consultations Public Welfare Cases	857
Number Treatment Consultations Treaty Indians	479
Number Miscellaneous P. H. Consultations	15,141
Number Antepartum Consultations	1,111
Number Infant and Pre-School Consultations	9,202
Number Treatment Home Visits	4,318
Number Treatment Home Visits to Public Welfare Cases	611
Number Treatment Home Visits to Treaty Indians	171
Number Miscellaneous P. H. Home Visits	2,360
Number Communicable Disease Home Visits	947
Number T.B. Home Visits	443
Number V.D. Cases Found, Treatment, and Home Visits	840
Number Maternal Welfare Home Visits	329
Number Infant and Pre-School P. H. Home Visits	1,165
Number Deliveries	37
Number Abortions	17
Number Cases sent to Doctor or Hospital	2,103
Number Deaths	22
Number Cases Communicable Disease	2,570
Number Letters and Telephone Calls	9,810
Number Newspaper or Radio Publicity	204
Total Fees Collected	\$20,497.60
Cost of Drugs and Surgical Supplies	\$21,672.70

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LECTURES, CLINICS, CLASSES—29 MUNICIPAL NURSING DISTRICTS

(21 I.D.'s)

(8 M.D.'s)

Number Lectures to Organizations	65
Number Films Shown	109
Number Generalized Clinics	511
Number Child Welfare Clinics	197
Number Home Nursing Classes	44
Number First Aid Classes	58

IMMUNIZATION WORK DONE AT OFFICE OR CLINICS

29 MUNICIPAL NURSING DISTRICTS

(21 I.D.'s)

(8 M.D.'s)

	Number of Doses
Number Immune Serum Globulin	285
Number Salk Vaccine	22,154
Number Diphtheria Toxoid	8,559
Number Pertussis Vaccine	6,474
Number Tetanus Toxoid	6,974
Number Smallpox Vaccine	1,411
Number Typhoid Fever Vaccine	369
Number Patch or Old Tuberculin Tests	3,495
Number Asian Flu Vaccine	2,052
Other Vaccines	49

SUMMARY OF SCHOOL REPORTS—29 MUNICIPAL NURSING DISTRICTS

(21 I.D.'s)

(8 M.D.'s)

Number of Visits to Schools	403
Number of Students Inspected	4,409
Classroom Talks	145
Number of Consultations with Teachers	596
Number of Consultations with Parents	817
Number of School Follow-up Home Visits	58
Number of Pre-school Children Examined	643
Pre-school Home Visits	50
Tuberculosis Clinics Held	37
Tuberculosis Home Visits	12
Number of Doses of Diphtheria Toxoid	2,160
Number of Doses of Tetanus Toxoid	1,971
Number of Doses of Smallpox Vaccine	316
Number of Doses of Whooping Cough Vaccine	935
Number of Mantoux and Patch Tests	3,120
Number of Doses of Salk Vaccine	8,104
Number of Lectures	61
Number of Films Shown	37

HEALTH EDUCATION

C. C. Evoy, B.Sc., *Director*

The health and welfare of the children of this country is one of our major national interests. The eighteenth century has been called the age of man; the nineteenth century the age of woman, and the twentieth century the age of the child. Future historians writing of the present will identify this period in history with the interest, activities and accomplishments in the welfare, training and development of the child.

During the past three decades, school health work has progressed from the teaching of physiology and hygiene to where it is now recognized that the school is as much responsible for the preservation of the child's health and the development of his physical well-being as it is in the guidance and training of his mental faculties.

Urbanization, mechanization and lack of facilities for children and youth to participate in physical activities have created a situation which interferes with physical fitness. Added to this are the pressures of modern living which influence mental and emotional fitness. However medical science during this period has made tremendous advances which have provided better health for those who have learned to make full use of modern medicine.

On the basis of the foregoing it seems reasonable that the schools should have the following responsibilities:

"To establish a healthful and safe environment. This means a good physical environment and also a satisfactory 'emotional climate'.

Every school should have a policy for determining the health status of all children. Every child should have a medical examination before entering school and at intervals suggested by health authorities.

The school should see to it that health and safety instruction are an integral part of the curriculum.

Adequate facilities should be provided and physical education scheduled in the school curriculum for all children and youth. Opportunity for intramural competition is advisable for students beginning at the sixth grade, with an interscholastic athletic program for grades nine to twelve.

The school has the responsibility of providing instruction in recreational activities, as well as that of providing facilities and the opportunity to participate.

Children must be taught to make use of modern medical and dental services, establish good health practices, and to participate in daily physical education. It is the responsibility of the schools to include physical education and health education in the curriculum at all grade levels."¹

1. Ray O. Duncan, Ed.D., West Virginia University.

TOURS AND MEETINGS

To organize a Health Education tour requires considerable preparation. If the field to be covered consists entirely of schools and children a number of health lessons must be prepared in readiness for teaching at the various grade levels. Should the objective be to work with teachers only, the initial steps involve the selection of suitable material for discussion and display. However, if the purpose of our tour is to work with lay groups, a number of talks will be required based on the needs of the communities being visited. Quite often one talk or lecture and a film to supplement will be useful to a number of separate groups. Visitation to local health staffs may require considerable equipment for a workshop in the use of audio-visual aids. Then, too, there is individual consultation with a member of the public health field staff on a matter of educational importance.

A single tour may occupy a period of a few days to a few weeks. In trips of short duration possibly only one of the above types of activity will be required; on a more extended tour it is not uncommon to have a program covering all phases of this type of service.

The success of such tours depends to a large extent upon the cooperation of the local health representative. Correct advance briefing of the individual group, organization officer, and staffs of schools and health units is most essential. This enables those concerned to orientate school children and colleagues for the forthcoming visit. In the case of a classroom talk the teacher will briefly discuss the purpose of the visit and acquaint the children with the subject to be presented. Quite often in conjunction with these health lessons or talks it is necessary to secure blackout material for rooms not equipped for film showing. Occasionally it is necessary to arrange for a hall. These are examples of the type of local assistance which contribute to a successful undertaking.

In 1957 many such settings were planned by public health field staff for the director of health education. The first tour of the year was in February to Fort Assiniboine to meet with the Home and School Association over a film and talk explaining the service of a health unit. This community was seeking information upon which to base a decision for inclusion within an organized health unit. Considerable discussion resulted in a vote being taken and a resolution requesting the health unit service was prepared for presentation to the minister of health.

Beta Sigma Phi, a business women's sorority in Edmonton, were interested in child behavior. A short talk introduced the subject. The film "Sociable Sixes to Noisy Nines" was shown and a discussion brought enlightenment to a few controversial topics. An opportunity of this nature is occasional and accepted with pleasure by health education service.

Other meetings of this nature took place at Marlboro and Namao in Edmonton. The sponsors were local Home and School Associations.

Schools

The opportunity to participate in school health education is always a challenging and rewarding experience. During the year a number of schools were visited to present lessons on health related to the provincial curriculum on Health and Personal Development. Subjects of interest were: dental health, nutrition, sanitation, communicable disease and alcoholism. Twelve separate films were screened to supplement the lessons taught in grades from one to twelve inclusive. Six hundred boys and girls were given instruction in these classes. An invitation was accepted to introduce two new films on venereal disease to students at the School of Education, University of Alberta. The two classes concerned previewed and evaluated the films with respect to use in the high school health program.

CONVENTIONS AND CONFERENCES

Through the director of Health Education Service the Department of Public Health has been represented on the Health Curriculum Committee, Department of Education, in the preparation of a health course for the junior and senior high schools. This committee reached its current objective early in the year. The courses of studies thus completed will be in use in Alberta schools for a period of five years before a revision will be approved. In the interim, committee members have opportunity to receive first hand evaluation of the course content through brief conferences with teachers. A study of the services of the Department of Public Health has been integrated into the program to prepare children for more effective and efficient use of our health services.

During the fall a number of health teachers were visited at schools in different areas of the province. A member of the local health unit staff accompanied the director of health education on each call. The purpose of the tour was to demonstrate health education materials and explain their effective application in the school health education program. The health teachers counselled in this manner averaged eight per school, with a minimum of one and a maximum of twenty-one teachers at the two extremes.

Three conferences were attended during 1957. The first was at Regina in April where health education directors of the Western provinces met to discuss programs in health with the stress on educational procedure and method. Ideas of merit were noted and implemented into our program where feasible. A dental health education work manual was examined and evaluated. It can be of much value if adopted by teachers in Alberta to assist in the presentation of material designed for prevention of dental caries.

In May the Municipal Nurses held their spring conference in Edmonton. A film which served as a basis for discussion was shown the group by the director of health education. The theme was child behavior. A display of new literature was available to the nurses.

Finally in the late fall the Medical Officers of Health Units Conference was attended by a representative from Health Education. New films, a filmstrip and health education literature were viewed and commented upon. Through group examination of this nature decisions regarding visual aids can be made for library selections.

A tour of health units and municipal nursing stations gave us an opportunity to discover how health education was being practiced in the field. A number of projects including a girl's study group, home and school requests for a health education program and school talks were under way in different sections of the province. There was proof of incidental health teaching at every point where health service is maintained. All public health personnel interviewed approved the suggestion that greater effort be directed to a broadened program in health education.

The teamwork between public health personnel and school staff could be made more effective through integration of their respective programs in health. Recognition of this philosophy is acknowledged by most and indications of application of the principle are beginning to show in many parts of the province. Each year in the fall, Health Education Service has an opportunity to display its literature at teachers' conventions. Our exhibit of colorful three panel units was organized around the curriculum in health for grades one to ten inclusive. The topic for the unit was selected from the curriculum guide for the grade concerned. These displays are constructed for easy folding and portability. Interest in this type of planned reference for subject-matter teaching was high.

Additional classroom health education materials were on display in folders, the literature classified by grade and topic. Application forms listing health literature for the different grades were available to teachers.

Health Units in areas where teachers' conventions were held provided staff to man the exhibits. This cooperative service gave an opportunity for teachers to discuss school health problems with the nursing and medical personnel of the health units.

Conventions attended were at Lac La Biche, Red Deer, Grande Prairie, Fairview, Edmonton Districts I, II and III, Calgary Rural, Camrose and Edmonton City.

WORKSHOPS

A workshop in health education may take form around a theme of a philosophical nature; it may be a planned teaching method; or it may exemplify the word workshop in its original meaning when directed to audio-visual aids. At Barrhead substation in the Sturgeon Health Unit a workshop on film utilization and use of audio-visual equipment was organized for June. Participation by staff members was effected through practice with equipment and role playing. Later, when autumn had set in, the health unit staff at Red Deer convened for a workshop on

methods employed in demonstration of health education materials before teacher groups. The culmination of this consultation was apparent sometime later at the local district teachers' convention where a series of health education displays were exhibited. The teachers viewed health education literature on usable media with direct application to classroom practice.

FILMS AND FILMSTRIPS

Production

Health Education Services prepared a script for a film on the Department. Mr. G. M. G. Smith of this division wrote the story as one of his major contributions to the program in health education. The filming was about completed at the close of the year. Colored prints of the new film should be available for general use in the province by the summer of 1958. This film will be used in conjunction with talks to groups interested in the history and development of the public health program of this province over the past four decades.

Preview

Each year we receive a large number of new films for preview from Canadian and American producers. These film titles have been selected because of their classification within the many categories of health education. Committees of public health and lay persons are organized to assist in the selection of previewed films for general showing throughout the province. There were ninety separate screenings of new films requiring the assistance of many individual committees.

Loan Service

With the ever-growing population of the province, with an increasing film library and the extensive demand for film loan, this audio-visual aid service is kept constantly busy booking films. Nursing Aides' Schools, Nurses' Training Programs, Home and School Associations, Health Units, Provincial Mental Institutes, the Victorian Order of Nurses, the St. John Ambulance Association, schools—city and country—and many other groups use this service.

Our more technical films on the subjects of childbirth and antibiotics are requested most frequently by Nurses-In-Training.

Films on child care and development are in demand by Home and School Associations, special study groups, and women's organizations.

Health Unit personnel borrow many films for in-service education. A critical examination of the film by the staff prepares them for presentation of the topic to school groups as a supplement to the school health education program.

During the year thirty-three new films and filmstrips were purchased, bringing the total to four hundred and four films, and one hundred and eighty-three filmstrips. Seventy-three of our films are so popular that several copies of each were made available to supply the demand for screening.

Public health films shown in the schools are bought with an eye to the health curriculum for the elementary and secondary schools of this province. Health topics available in films are developing in wider areas of the educational field each year. A selective policy enables us to provide films suitable for different grade levels ranging from one through twelve. All films are available on a free loan basis. A catalogue of descriptive film listings is available to all schools.

Associations, Federations and Women's Groups borrow films to supplement talks or to use as a basis for group discussions at meetings.

During the year the screenings of health education films totalled 9,008 with an estimated audience of 582,045.

Not only does the hit parade have their hit songs, but, we too, have films that are more popular than others. For two successive years now, the film "Your Health Unit", has been at the top of the list. This film, which portrays the work of a health unit, was produced by our department. Immunization, Age of Turmoil in adolescent development, Defence Against Invasion concerning the mechanism of immunization, Human Reproduction and One Girl to Another in the area of personal hygiene were also very much in demand.

RADIO TALKS

Once a week over CKUA, this division sponsors a recorded talk on topics of health, including child care and development, mental health, communicable diseases, chronic diseases, dental health, personal hygiene, physiology, sanitation, and first aid and safety. These talks consist of interviews which disclose interesting and informative thinking on these areas of health education.

With each broadcast, the availability of pamphlets and films, related to the subject is announced.

Information sheets on this radio service are sent out periodically, with orders of literature, outlining program topics and related pamphlets and films.

EXHIBITS AND DISPLAYS

During the Edmonton Exhibition, a representative of this division illustrated the services of the department from prepared slides screened on a projectograph. The filmstrip projector was also used in conjunction with the tape-recorder to present the aims, purposes and services offered by each of the divisions of the department.

In October a representative from this division attended the three Alberta Teachers' Association Conventions in Edmonton and a fourth in Calgary.

At the conventions we exhibited a series of nine, three-sided painted displays, portraying suitable school health literature,

graded and classified. Also listed on these displays were health film titles associated with the theme of the display. Forms requesting literature exhibited were made available for the teachers to complete at their convenience.

Our attendance at the conventions was an opportunity for the divisional representative to mingle with the teachers, listen to and discuss their health education problems, and explain how we might be of help to them.

The majority of teachers contacted were familiar with our services and were making use of them in the schools. We found that the teachers were primarily interested in material that was new or revised. Secondary to this was appraisal and approval of time-tested aids.

The division also made the most of these opportunities to promote new and sustaining interest in our library of health films, as teaching aids. There were teachers who were not familiar with our film library and the services offered through it.

HEALTH EDUCATION LITERATURE

Publicity, thought and hard work have been rewarded by a demand almost exceeding the supply of health education literature in some fields. Through the various media of radio, television, newsletters, bulletins, and specific pamphlets on health subjects, our services are reaching the homes, schools, organizations and associations in the province. Our material distributed, covers the fields of child care and development, mental health, communicable diseases, dental health, sanitation, personal hygiene, first aid and safety.

The "Canadian Mother and Child", and "Up the Years From One to Six", are two of the most popular books distributed from this division. Another production is an individual health chart very much in demand for pupils in the elementary grades in the schools. "Ways to Keep Well and Happy", a well-illustrated and well-written booklet on good rules for good health, was very popular as a school request in the elementary grades. "About Us and Our Friends", a primary reader-like booklet on health and "Common Childhood Diseases", was also in heavy demand.

A mimeographed booklet depicting in outline the organization and services of the department is brought up to date yearly. This material is an invaluable aid to teachers of health. Further to this topic a printed publication, "Alberta's Health Services Program", is also widely distributed to homes, schools, associations and organizations.

THE ANNUAL REPORT

The distribution of the annual report of the Department of Public Health has been a service provided by this division. Approximately four hundred copies are mailed to interested individuals and organizations.

NUTRITION SERVICES

ELVA M. PERDUE, B.Sc. (H.Ec.), B.Ed., *Nutritionist*

During the past year, definite progress was made toward establishing nutrition services on a consultant rather than a direct basis. This was due to an improved understanding at both provincial and local levels of the nutritionist's role in the health department program as well as to an increased number of requests for consultation.

Service provided at the local level is dependent to a great degree on the special interests of the local health personnel. Staff education in nutrition, especially for municipal and health unit nurses, continues to be an important service, but since time for this phase of the program is limited, it is necessary to emphasize general principles rather than details. The nutritionist is also available for assistance with problems in the field. This entails spending time with the nurses in their areas for conferences, home visiting and program planning.

At the provincial level, the nutritionist again provided in-service training and orientation in nutrition for municipal and health unit nurses joining our staffs. Provincial conferences staff meetings and a refresher course were also attended during the year to assist professional personnel to keep up with new developments in nutrition. Field staffs continued to be informed of current trends by the monthly mimeographed release "Nutritionally Speaking" and comments on this material were most encouraging.

Health department personnel have organized community classes in general nutrition education and special classes for prenatal and overweight women. The nutritionist has assisted in planning the lecture material and in some cases has taught the classes. A gratifying growth of interest in the dietary budget of low income families and in special diets for convalescents has been noted.

The nurses employed in industry continue to request assistance for workers and our nutrition exhibits have been in considerable demand for their programs.

A further function of Nutrition Services is assistance to small institutions which do not employ a dietitian. Accordingly, at the request of the Department of Municipal Affairs, a survey of the dietary department at the Pleasantview Home in Youngstown was carried out in the month of September. A report was prepared, suggestions made and quantity recipes supplied. Consultant service was also given during the year to private and public hospitals and to some residential schools which requested assistance with their problems in food service, menu planning

and food purchasing. The publications "Institutional Supper Menus" and "Menu Suggestions" continue to meet a wide need in this area.

Among social agencies requesting consultation service in 1957 were the Victorian Order of Nurses, Indian and Northern Health Services, City of Edmonton Welfare Department and the Salvation Army. Assistance was also given to university students with the research required for their nutrition assignments.

Much of the time of the nutritionist is devoted to educational activities for school children and has been spent this year in planning nutrition programs and projects. This work falls into three areas—assistance to teachers in securing materials, in planning animal feeding experiments and in student diet record studies. The animal feeding experiments have created interest among both students and parents and new record sheets have been obtained so that teachers can now evaluate diet records with little assistance from the nutritionist. To further the dissemination of nutrition knowledge via the schools, public health nurses are encouraged to carry folders of nutrition publication on their school visits. The teachers are then given an opportunity to complete order forms to obtain the publications for use in their classrooms. Personal contact with teachers was widened by a paper which was prepared and delivered by the nutritionist at the Edmonton Teachers' Convention in February.

Individual inquiries from both lay and professional persons were answered as usual throughout the year as promptly and as completely as possible. Assistance was given on a variety of subjects, including budgeting, food values and food fads. A wide variety of personal and form letters, publications, reports, statistics, monthly bulletins and posters were sent out in connection with the nutritionist's information service to the public.

A small lending library of nutrition books continues to operate from the central office as a resource for the staff and, in some cases, for the general public. One of the most popular books in 1957 was "Diabetic Care in Pictures". Reference publications and files were also loaned on request.

In addition to the nutritionist's duties within the province, she was granted permission to attend the annual meeting of the Dominion-Provincial Nutrition Committee and participated in the program.

Miscellaneous activities have been too many and varied to incorporate into a single report. They range from such things as pre-planning market orders and menus for summer camps to helping a housewife to meet adequate dietary standards and assisting the matron of a small hospital to obtain standardized recipes for her hospital. These, together with other miscellany, resulted in increased work output from this office during 1957.

ENTOMOLOGY

J. H. BROWN, B.Sc., M.Sc., F.A.P.H.A., M.R.S.H., *Director*

The Division of Entomology deals with insect-borne diseases, and reservoirs of human infection in native small mammals, with particular attention being paid to Rocky Mountain Spotted Fever, Colorado Tick Fever, Bubonic Plague, Tularaemia and Encephalomyelitis and other lesser well-known conditions.

Other insect problems, such as fly and mosquito control, insecticides, insect infestation in food-stuffs and insect pests of institutions, fall within the work of the Division. Furthermore, a considerable amount of time is devoted to determining the distribution of insects, ticks and mites that are involved in the transmission of human diseases.

TICK SURVEY

Rocky Mountain Spotted Fever ticks are well established in Alberta. Their known and supposed range embraces all of that part of Alberta south of a line from Empress west to Calgary, and thence north and west in the foothills and mountains north to Fort St. John, B.C.

During 1957 a total of 1,590 doses of Rocky Mountain Spotted Fever vaccine were given. Of these 809 were given at Manyberries, Redcliff, Medicine Hat, Elkwater and Thelma. There were 781 given at Ralston.

A number of drilling and seismographic companies also secured vaccine during 1957 for the protection of their personnel working in the tick-infested areas of the province.

PLAGUE SURVEY

Two very large areas of plague infection, one centering on Hanna and the other on Brooks, exist in Alberta. In both of these areas plague-infected gophers and plague-infected gopher fleas are present in large numbers.

It is known that there are 14 species of fleas in Alberta that are capable of transmitting plague from infected animals to man. Fortunately most of these species are not very numerous, and in many cases their distribution is limited. In 1957 a number of flea collections were made in various areas but no positives were found, but it should be obvious that the lack of positives does not necessarily mean any decrease in the amount of infection in fleas and gophers.

FLY CONTROL

Lethbridge Fly Control District. In 1957 the fly control program was very successful with the benefits being received by the towns, villages and dairy farmers participating far outweighing the actual cost.

Camrose Fly Control. During 1957 the program was expanded and excellent results were obtained with the use of the

"Tifa" fogging machine, which was purchased in 1954 on the recommendation of this Division.

MOSQUITO CONTROL

Edmonton. During 1957 the program consisted of spraying and larvaciding with DDT pellets.

Medicine Hat. This Division advised the City of Medicine Hat as to the best methods to follow. This program consisted of the use of a "Tifa" machine supplemented with larvaciding. It proved to be an economical and effective control program.

SCHISTOSOMIASIS

Practically all of our lakes are infested with *Schistosoma dermatitis* which is commonly called "swimmer's itch", and is caused by the penetration of the skin by a small fork-tailed parasite (cercariae). In man it always follows bathing or swimming in infested lakes or ponds and is characterized by a localized area of very itchy weals.

Snails, which are the hosts for the *cercariae*, are sensitive to copper, and small quantities of it in the water will poison them. Some work has been done with the use of copper sulphate (blue vitriol), copper carbonate and copper ores in the killing of snails. However, permanent control will call for extensive survey and experimental work.

LEECHES

During 1957 reports of the leech infestation came in from many Alberta lakes and appropriate advice was given.

HARVEST ITCH

Harvest itch is a skin condition somewhat similar to scabies and is caused by mites. The mites involved are normally on such vegetation as grain and grasses and are accidentally transferred to the person of harvesters and others handling such materials. Necessary advice was given to Health Units and local practitioners.

LABORATORY

Insect Collections. Good progress is being made in arranging the collection of insects and ticks injurious to human health.

During 1957 there were also 42 separate collections of insects from different products and places, sent in for determination. The insects in these samples were identified and suitable information was supplied to the person from whom the sample had been received.

INSECTICIDES

Vapourizers are mechanical devices for releasing the fumes of lindane and other insecticides by means of electrical heating

elements. Installation regulations under the Canadian Standards Association are used to control their use in food-handling establishments.

This Division has always maintained that there is no *safe* insecticide, but that all insecticides can be used *safely*. To give some protection in the event of poisoning, our publication on "Antidotes for Pesticides" was reprinted for wider distribution to Physicians, District Nurses and Hospitals.

The usual educational work in regard to the control of insect-borne diseases was carried out by means of radio, motion pictures, newspapers and lectures. The usual lectures to Medical Students, Public Health Nurses, Nurses-in-Training and Undergraduates were given, and in some cases, expanded.

DIVISION OF MEDICAL SERVICES

M. G. McCALLUM, M.D., *Director*

THE SCHOOL FOR NURSING AIDES

The School for Nursing Aides in Calgary continued to operate at near capacity in 1957 with its program of providing an education for individuals, who, when they become licensed as Nursing Aides, are employed in hospitals throughout the province. There is an ever increasing demand for these Aides who provide bedside nursing to hospital patients and thus are an integral part of the nursing team with the graduate nurses. As a result, plans are being made to open a school in Edmonton early in 1958.

The present school in Calgary is operated by the Provincial Department of Public Health, and was opened in 1946. The total number of students enrolled at the school during the calendar year 1957 was 276. The number completing the course during this time was 214.

Since the inception of the program the Aides certified on a calendar year basis are as follows:

1946	10	1952	216
1947	41	1953	208
1948	160	1954	256
1949	117	1955	270
1950	159	1956	254
1951	247	1957	239

The total number certified since 1946 is 2,177. Of the total certified as of December 31, 1957, there are 1,197 employed in Alberta hospitals and 246 employed in hospitals outside the province.

Over one-half of the Nursing Aides certified in the twelve years since the inception of the program are on active duty in hospital work in this province, thus contributing greatly to the Provincial Hospital Program.

NURSING RECRUITMENT PROGRAM

There has been a considerable shortage of nursing personnel in the hospitals of the province and in an attempt to relieve this shortage somewhat, the Provincial Government in 1956 instituted a program of Nursing Recruitment. This includes an effort to recruit applicants for education as Nurses and Nursing Aides. A Nursing Recruitment Officer was employed by the Department of Public Health to carry out a recruitment program. This is done by means of pamphlets, posters, newspaper advertisements, radio and television. Films and filmstrips are in use also. Material is prepared and distributed for use by counsellors in secondary schools. Speakers are obtained for Career Day talks in schools. The Recruitment Officer also visits schools throughout the province and informs students of the career possibilities in the field of nursing.

The direct results of instituting this program are rather difficult to assess, but it is felt that the nursing situation in the province is considerably better than it would be otherwise. The program has the full co-operation of the schools and hospitals throughout the province.

THE LABORATORY AND X-RAY SCHOOL

During the period since 1954 when this school was established in Edmonton to provide technical assistance in diagnostic laboratory and radiological services for the small general hospitals of this province, there has been a considerable improvement in such services provided by those small hospitals able to obtain such assistance. At the end of the 1956-57 school term there had been a total of 41 technicians placed in these hospitals.

The course, which requires six months to complete, provides three months training in clinical laboratory and three months training in x-ray. During 1957 there were 16 technicians certified in March and 18 students enrolled in October. At the end of this period there was a considerably larger demand for technicians than could be filled by this school.

STATISTICAL DATA—DECEMBER 31st, 1957

Certified Technicians—1955-1957

Year	Location of Technicians at Dec. 31st, 1957			
	Certified Technicians	In Alberta Hospitals	In Hospitals other areas	Inactive
1955	14	8	1	5
1956	12	6	4	2
1957	16	16	0	0
Totals	42	30	5	7

It will be noted from the above table that 30 out of a total certification of 42 technicians were still active in Alberta hospitals at the end of the year 1957.

HOSPITALIZATION AND TREATMENT SERVICES FOR SOCIAL SERVICE RECIPIENTS

During 1957, as during 1956, persons eligible under the program of health care for Social Service Recipients received complete hospitalization care at government expense without charge, except for a few minor exceptions. The treatment services included medical care, dental services, optical services, and special services such as physiotherapy, etc., on approval of the Department.

Provincial expenditures on behalf of the group amounted to \$3,743,750.70 in 1957, of which \$381,399.00 was spent in per diem and extra per diem grants. These expenditures were \$203,018.21 more than the expenditures in 1956. The breakdown of provincial expenditures on behalf of the group in 1956 and 1957 is shown in Table I.

TABLE 1
PROVINCIAL EXPENDITURES ON BEHALF OF PENSION GROUP—1956 AND 1957

	1956	1957
Hospitalization	\$2,705,375.90	\$2,834,488.05
Medical Care	603,839.48	672,943.79
Dental Care	146,385.30	146,480.65
Optical and Optometric Services	82,762.81	87,190.96
Other Treatment Services	2,369.00	2,647.25
TOTAL	\$3,540,732.49	\$3,743,750.70

The average number of Social Service Recipients in the province was 36,620 in 1957, an increase of 87 over the previous year. The average per eligible pensioner expenditure for the group was \$102.23 in 1957. The comparable figures for 1956, 1955 and 1954 were \$96.61, \$94.95 and \$85.23 respectively. At December 31st, 1957, the Social Service Recipient group comprised the following:

TABLE 2
SOCIAL SERVICE RECIPIENTS AS OF DECEMBER 31, 1957

	Recipients	Spouses	Dependents and Children	Total
Old Age Security (A)*	19,514	2,150	346	22,010
Old Age Assistance	5,327	1,093	326	6,746
Old Age Security (B)†	524	.....	.....	524
Blind Pension	399	117	140	656
Mother's Allowance	1,842	.....	4,402	6,244
Widow's Allowance	783	.....	6	789
TOTAL	28,389	3,360	5,220	36,969

*Recipients of Old Age Security plus supplementary allowance. Recipients and dependents entitled to services.

†Recipients of Old Age Security with income not exceeding \$1,000 if single, \$1,500 if married. Recipient alone entitled to service.

1. Hospitalization of Social Service Recipients

The daily hospitalization payments under this program, including the \$1.50 per day paid in per diem grants, were as follows in 1957:

Hospital Groups	First 20 days	Subsequent to 20th day
A	\$13.25 per day	\$9.75 per day
B	\$10.95 per day	\$8.40 per day
C	\$10.15 per day	\$7.80 per day
D	\$ 9.95 per day	\$7.80 per day
E*	\$11.05 per day	\$9.30 per day

*Includes Outpost Grant of \$1.80 per day

During 1957 the pensioners spent a total of 254,266 days in hospital, an average of 6.9 days for every pensioner eligible compared to 5.7 days in 1951. The examination of the data presented in Table III reveals, however, a decreasing tendency in the pensioners' average stay in hospital in the past two years, 1956 and 1957. The average length of stay of pensioners decreased from 15.6 days in 1955 to 14.4 days in 1957. The increase in the pensioners hospital days, therefore, can largely be attributed to the rise in admission rate of pensioners, which went up from 39.3% in 1952 to 47.5% in 1957.

The study of pensioners in their respective groups shows that Old Age Pensioners and Blind Pensioners experienced a decrease in their average length of stay while pensioners who fall under Widow's Allowance and Mother's Allowance groups experienced an increase in their average length of stay.

TABLE 3
HOSPITAL UTILIZATION OF SOCIAL SERVICE RECIPIENTS BY GROUP—1952-1957

Year	Average Eligible	Number Hospitalized	Number Hospitalized as % of Eligible	Average Stay
ALL GROUPS				
1952	30,750	12,100	39.3	15.2
1953	32,757	13,921	42.5	15.5
1954	33,765	15,087	44.7	15.0
1955	35,623	16,418	46.1	15.6
1956	36,533	17,119	46.9	14.8
1957	36,620	17,382	47.5	14.4
OLD AGE GROUP				
1952	24,831	10,869	43.7	15.9
1953	26,348	12,468	47.3	16.2
1954	26,987	13,410	49.7	15.7
1955	28,299	14,640	51.7	16.4
1956	28,974	15,399	53.2	15.4
1957	29,031	15,522	53.5	14.9
MOTHER'S ALLOWANCE				
1952	4,981	921	18.5	6.9
1953	5,189	963	18.6	7.6
1954	5,497	1,061	19.3	7.0
1955	5,954	1,126	18.9	7.1
1956	6,141	1,117	18.2	6.9
1957	6,172	1,138	18.4	7.0
BLIND PENSION				
1952	750	273	36.4	13.5
1953	645	284	44.0	14.4
1954	599	293	48.9	15.8
1955	623	315	50.6	14.8
1956	622	297	47.8	17.1
1957	646	376	58.2	15.9
WIDOW'S ALLOWANCE				
1952	188	37	19.7	10.5
1953	575	206	35.8	12.2
1954	682	323	47.4	11.9
1955	747	337	45.1	11.4
1956	796	306	38.4	12.5
1957	771	346	44.9	14.2

2. Medical Care of Social Service Recipients

The provincial program of medical care to this group remained unchanged in 1957. The province continued to pay the Alberta College of Physicians and Surgeons \$1.37½ each month for every eligible individual under the plan with the College looking after the disbursement of the funds to the individual practitioners concerned for medical services rendered to pensioners.

In 1957, the province spent \$672,943.79 on this service, a sum of \$69,104.31 (or 11.4%) more than in 1956. Administration costs to the College of Physicians and Surgeons were \$24,039.59 (or 3.6%) of the total amount received.

Table IV shows the data on utilization of medical services by the Social Service Recipient group, during the year April 1, 1957 to March 31, 1958.

TABLE 4
UTILIZATION OF MEDICAL SERVICES

Type	Number of Office Calls	Number of House Calls	Number of Hospital Calls	Total
Old Age Group	62,231	27,597	199,331	289,159
Dependents	10	4	27	41
Mother's Allowance	5,649	741	3,258	9,648
Dependents	2,927	581	2,149	5,657
Blind Pensioners	1,552	630	4,093	6,275
Dependents	26	1	67	94
Widow's Allowance	2,201	340	3,265	5,806
TOTAL	74,596	29,894	212,190	316,680

3. Dental Services for Social Service Recipients

This program likewise remained unchanged in 1957. The province continued paying the Alberta Dental Association 33½ cents each month for every eligible individual under the plan, with the Association looking after the payment to individual dentists for services rendered to pensioners.

This service cost the province \$146,480.65 in 1957 as compared with \$146,385.30 in 1956. Administration costs to the Alberta Dental Association were \$12,392.23 (or 8.5%) of the total amount received.

Table V shows the utilization of dental services by the Social Service Recipient group during the last five years, 1953-1957.

TABLE 5
SOCIAL SERVICE RECIPIENTS UTILIZATION OF DENTAL SERVICES 1953-1957

Type	Number of Claims					As % of Eligible				
	1953	1954	1955	1956	1957	1953	1954	1955	1956	1957
Old Age Group	3,001	2,973	3,442	3,356	3,442	11.4	11.0	12.2	11.6	11.9
Mother's Allowance	2,085	2,120	2,387	2,449	2,700	40.2	38.6	40.1	39.9	43.7
Blind Pension	155	135	158	151	149	24.0	22.5	25.4	24.3	23.1
Widow's Allowance	104	127	129	147	129	18.1	18.6	17.3	18.5	16.7
TOTAL	5,345	5,355	6,116	6,103	6,420	16.3	15.9	17.2	16.7	17.5

There were 317 more pensioners utilizing dental services in 1957 than in 1956, adding up to a total of 6,420 pensioners. A greater percentage of the claims occurred in the Old Age and Mother's Allowance groups, with the former having 53.6% of the total claims and the latter 42.1%. However, a higher percentage (43.7%) of the Mother's Allowance group had dental care than any other pension group in 1957. This high rate of utilization in the Mother's Allowance group is due to the high percentage (70.5%) of children in it.

4. Optical Services for Social Service Recipients

A total of 6,901 accounts for eyeglasses at a cost of \$63,949.96 were approved and paid for in 1957. This is 202 accounts and \$2,567.65 (or 4.2%) more than in 1956. Total payments to optometrists in 1957 was \$23,241.00 for 4,728 claims as against \$21,380.50 for 4,424 claims in 1956. This is an increase of 8.7% in expenditures and 6.9% in claims.

Payment to the medical eye specialists is a part of the over-all medical program.

5. Other Treatment Services

These services include physiotherapy, nursing services, chiropody and chiropractic services, and are provided on the recommendation of the patient's physician and with the approval of the Director of Medical Services. Expenditures on these services amounted to \$2,647.25 in 1957, an increase of \$278.25 (or 11.7%) over 1956.

POLIOMYELITIS HOSPITALIZATION AND TREATMENT PROGRAM

This program together with the Orthopaedic program, experienced a decline in expenditure in 1957. Total payments by the province on behalf of poliomyelitis patients amounted to \$529,192.10 in 1957, a drop of 17.3% from the expenditures in the preceding year.

The breakdown of these payments with 1955 and 1956 figures included for comparative purposes are given in Table VI.

TABLE 6
POLIOMYELITIS PAYMENTS

	1955	1956	1957
Isolation Hospital Care	\$ 27,840.05	\$ 7,563.50	\$ 4,284.95
Post Isolation Hospital Care	534,517.15	495,849.60	437,282.60
Medical Care in Hospital	98,212.50	93,581.95	54,677.60
Medical Supervision in Hospital	10,450.00	7,100.00	6,600.00
Appliances and Outpatient Services	43,471.73	35,940.64	26,346.95
TOTAL	\$714,491.43	\$640,035.69	\$529,192.10

Of the total payments for medical care in hospital for poliomyelitis patients, a sum of \$13,906.00 was paid to the College of Physicians and Surgeons for medical care of respirator cases, \$26,329.60 was paid to surgeons for operative procedures, and the remaining \$28,348.00 was expended for other medical care cases.

The rates paid to hospitals for the Isolation and Post-isolation care of poliomyelitis patients remained unchanged in 1957 from the year before and were as follows:

ISOLATION PERIOD				
Class of Hospital	Patient pays per day	Province Pays Per Day		
		For patients requiring ordinary ber care only	For Tracheotomy cases requiring bed care only	For all respirator cases
A	\$2.00	\$10.25 & \$1.00	\$30.00 & \$1.00	\$40.00 & \$1.00
B	\$1.80	\$ 8.30 & \$1.00	\$30.00 & \$1.00	\$40.00 & \$1.00
C	\$1.60	\$ 7.10 & \$1.00	\$30.00 & \$1.00	\$40.00 & \$1.00
D	\$1.50	\$ 6.80 & \$1.00	\$30.00 & \$1.00	\$40.00 & \$1.00
E	\$1.30	\$ 5.90 & \$1.00	\$30.00 & \$1.00	\$40.00 & \$1.00

POST ISOLATION PERIOD				
Class of Hospital	Patient Pays Per Day	Province Pays Per Day		
		For Patients Requiring ordinary care only	Extra Payments for those in respirators	For Medical Care
A	Nil	\$10.25 & \$1.00	\$15.00	60¢
B	Nil	\$ 8.30 & \$1.00	\$15.00	60¢
C	Nil	\$ 7.10 & \$1.00	\$15.00	60¢
D	Nil	\$ 6.80 & \$1.00	\$15.00	60¢
E	Nil	\$ 5.90 & \$1.00	\$15.00	60¢

The vast majority of poliomyelitis patients in 1957 were treated in the hospitals at Edmonton, Calgary, and Banff. The greatest number of patients were treated at the University Hospital in Edmonton which absorbed more than one-half (53.6%) of the total payments made by the province to approved hospitals for poliomyelitis care and treatment.

DIVISION OF CANCER SERVICES

V. W. WRIGHT, M.D., *Director*

The three Cancer Clinics in the Province of Alberta have experienced a very busy year (1957) as the tables below will reveal.

Statistical Cards for 1957 have been punched by our own staff and are in the process of being printed on an International Business Machine. When finished and sorted, complete statistical information will be available for 1953-54-55-56 and 1957 (a five-year period).

1. Number of examinations made (Malignant and Benign)
January 1st-December 31st, 1957, is 18,243.

	New		Review		Total	
	1957	1956	1957	1956	1957	1956
Edmonton	2,843	2,716	8,902	8,663	11,745	11,379
Calgary	1,514	1,483	3,206	2,766	4,720	4,249
Lethbridge	530	525	1,248	907	1,778	1,432

It will be noted that the total number of examinations made in the Edmonton, Calgary and Lethbridge Clinics is 18,243, as compared with 17,060 in 1956; 14,306 in 1955; 13,026 in 1954; 10,827 in 1953 and 9,291 in 1952.

2. Number of examinations made where malignancy was proven—11,838 as compared with 11,087 in 1956 as shown in the following table:

	Edmonton	Calgary	Lethbridge	TOTAL
1957	8,876	1,620	1,342	11,838
1956	8,625	1,506	956	11,087

	Malignant Cases Registered at Clinics	Malignant Cases Not seen at Clinics	TOTAL
Edmonton	1,220*	238	1,458
Calgary	544*	66	610
Lethbridge	215*	1	216
	<hr/> 1,979	<hr/> 305	<hr/> 2,284

The total number of malignant cases discovered in Alberta in 1957 was 2,284.

*A few cases treated previously in other provinces are included in these totals.

4. New Malignant Cases:

	Edmonton	Calgary	Lethbridge	TOTAL
1957	1,220	544	215	1,979
1956	1,120	563	166	1,849

There were 89 cases in the Edmonton Clinic which had not been malignant on previous examinations in which malignancy was proven this year.

There were 68 cases in the Edmonton Clinic which were malignant in previous years (before 1953) and reported to the Clinic for recheck examination this year.

5. Number of examinations made on patients which proved Benign—

	Edmonton	Calgary	Lethbridge	TOTAL
1957	2,869	3,100	436	6,405
1956	2,754	2,743	476	5,973

The X-Ray Department of the Edmonton Clinic has had a particularly busy year as shown in the following table:

Diagnostic Radiology	1957	1956
Number of patients	4,236	3,714
Number of examinations	5,665	4,574
Number of X-ray films taken	17,338	14,000 (app.)
Therapeutic Radiology		
New patients	626	588
Treatments given by		
Cobalt 60	7,904	5,644
X-ray	3,005	4,313
Cobalt 60 and X-ray	402	345
Total number of treatments	11,311	10,302
Radium Insertions, implants and moulds	172	161
Biopsies done	154	141
Blood counts done in Clinic Laboratory	6,024	4,143

NUMBER OF CASES SUPPLIED WITH THE FOLLOWING SERVICES

	Hospital Services		Radiation Therapy		Diagnostic X-Ray	
	1957	1956	1957	1956	1957	1956
Edmonton	915	922	626	628	5,674	4,591
Calgary	588	420	385	367	812	781
Lethbridge	202	315	125	134	465	322
	1,705	1,657	1,136	1,129	6,951	5,694

	Major Surgery		Exploratory Laparotomy		Breast Biopsies	
	1957	1956	1957	1956	1957	1956
Edmonton	566	583	108	149	230	225
Calgary	432	320	82	74	235	215
Lethbridge	117	92	21	25	88	115
	1,115	995	211	248	553	555

	Other Biopsies		Diagnostic Curettages		Encephalograms, etc.	
	1957	1956	1957	1956	1957	1956
Edmonton	475	524	245	238	11	13
Calgary	370	282	76	43	0	0
Lethbridge	164	142	27	62	0	0
	1,009	948	348	343	11	13

	Bronchoscopy & Oesophagoscopy		Sigmoidoscopy		Cystoscopy	
	1957	1956	1957	1956	1957	1956
Edmonton	102	90	226	203	220	206
Calgary	14	13	4	3	98	48
Lethbridge	4	2	9	8	26	18
	120	105	239	214	344	272

	Diagnostic Consultations		Laboratory Tests	
	1957	1956	1957	1956
Edmonton	110	131	6,118	4,187
Calgary	46	34	—	—
Lethbridge	2	3	26	12
	158	168	6,144	4,199

*Included in Nursing Services

Since the opening of the Clinics in 1941 the total number of examinations made is 134,572.

DIVISION OF SOCIAL HYGIENE

P. L. RENTIERS, M.D., *Director*

The year 1957 has shown a gratifying decline in the incidence of syphilis in Alberta especially in the early (Primary and Secondary) infectious forms of this disease. It will be noted from the statistical report that the decrease in incidence of syphilis, all forms, amounted to 13.9%. Of particular significance is the very definite decrease of 65.4% in the primary infections and the even larger drop of 72% in the secondary infections.

On the other hand, since new case findings has been continuously emphasized, the mass blood surveys conducted largely by the Mobile Clinic have turned up a greater number of previously undiagnosed late infections. In latent and late syphilis (non-infectious) an increase of 38.1% occurred. In congenital syphilis eleven cases were reported, an increase of eight cases over the figures for 1956. It is heartening to realize, however, that in this group no newborn was reported to the department, the eleven cases ranging in age from eight to eighteen years. Nine of these were asymptomatic and were diagnosed by routine blood testing. The two remaining cases were discovered as a result of medical examination (interstitial keratitis).

Insofar as gonorrhoea is concerned, there were 351 more cases reported than in 1956, which represents an increase of 18.3%. Many factors may be advanced to explain the variance. There appears little doubt that the nature of the disease, with its short incubation period, its asymptomatic carriers, renders it less amenable to mass control, despite the relative ease of treatment. Painsstaking tracing of contacts and sources of infection will of course be reflected in a heightened recognition. This Division is doubtful that even the above high figure is a true one. In this era of rapidly effective antibiotics one feels that many cases are not reported, as unfortunately no laboratory control exists for gonorrhoea as it does for syphilis. In this manner many contacts to infected cases are beyond the reach of our social investigators.

Of special interest is the fact that 12.2% of the total number of cases of syphilis reported in 1957 occurred in recent immigrants to the province.

The metis and Indian population (approximately 4.5% to 5% of the total population of Alberta) accounted for 29.9% of all venereal disease reported to this Division.

The statistical report of the Division is as follows:

ALLEGED SOURCES OF VENEREAL INFECTION OR CONTACTS

For the Period January 1st, 1957 to December 31st, 1957

Location of Source of Infection or Contact	Number of Sources of Infection or Contacts Reported	Number of Sources of Infection or Contacts Located	Percentage of Sources of Infection or Contacts Located
Edmonton	941	836	89%
Calgary	413	379	92%
Lethbridge	31	24	77%
Remainder of Province	781	702	90%
ALBERTA TOTALS	2166	1941	90%
Sources of Infection or Contacts reported outside of the Province of Alberta	132	51	41%
TOTALS	2298	1992	87%

Unit Forwarding Information	Number of Sources of Infection or Contacts Reported	Number of Sources of Infection or Contacts Located	Percentage of Sources of Infection or Contacts Located
Armed Forces	96	75	78%
Private Doctors and Provincial Clinics	2057	1818	88%
Other Provinces	145	99	68%
TOTALS	2298	1992	87%

Sources of Infection in Alberta who could not be located by authorities concerned 167
 Sources of Infection outside of Alberta who could not be located by authorities concerned 12
 Number of Notification Cards (N.H. 1) with no information for contact finding 359

DETAILS OF INFORMATION ON THE FACILITATION PROCESS

How Informant Met Source of Infection or Contact		Where Informant Met Source of Infection or Contact	
Pick-ups	656	Boarding or Rooming House	16
Introduction	40	Restaurant or Beer Parlor	192
Friend	203	Dance Hall	41
Marital Partner	334	Street or Outdoors	116
Common-law Wife	182	Friend or Private House	270
House of Prostitution	0	Hotel	80
Casual Acquaintance	52	Marital Partner	333
Appointment	4	Recreation or Private Party	50
No Data Available	827	Train, Bus or Bus Depot	14
		House of Prostitution	0
		Taxi or Taxi Office	2
		At Work	9
		No Data Available	1175

DETAILS OF INFORMATION OBTAINED ON THE CONTACT INVESTIGATION

Place of Exposure		Occupation of Source of Infection or Contact	
Rooming House	79	Waitress, Waiter or Bartender	141
Apartment	19	Housewife	125
Private House	329	Prostitute or Street Walker	30
Outdoors	59	Domestic, Hotel or Hospital Maid	91
Car or Truck	207	Clerk, Salesman, Steno, Teacher or Cashier	68
Train, Motel or Trailer	34	Factory or Plant Worker	4
Hotel	219	Entertainer	2
Room, House or Shack	346	Service Personnel	7
House of Prostitution	0	Unemployed	30
No Data Available	1006	Laundress or Dry Cleaners	6
		Truck, Taxi or Bus Driver	31
		Farmer, Trapper or Logger	17
		Nurse, Nurses' Aide or Intern	13
		Dressmaker or Hairdresser	3
		Laborer or Transient	38
		Businessman	1
		Tradesman, Electrician or Plumber	25
		Student, Usherette or Usher	16
		Dispatcher	1
		Fireman or Trainman	4
		Contractor or Construction Worker	8
		Janitor	1
		Switchboard or Telephone Operator	4
		No Data Available	1632

DEPARTMENT OF PUBLIC HEALTH

PROVINCIAL CLINIC, Alberta Jasper Building, 9815 Jasper Avenue, Edmonton, Alberta.
Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Chancroid									1				1
Gonorrhoea (All Forms) ..							36	33	507	222			798
Syphilis (Congenital)								2					2
Acquired—Primary									6				6
Acquired—Secondary									1				1
Acquired—Latent								1	12	7			20
TOTALS							36	36	526	230			828

Number of Cases of Chancroid—Male 1, Female 0	1
Number of Cases of Syphilis—Male 18, Female 11	29
Number of Cases of Gonorrhoea—Male 543, Female 255	798
Number and Results of Serological Tests for Syphilis: 8,772 of which 344 were positive.	
Number and Results of Darkfield Examinations: 45 of which 2 were positive.	
Number and Results of Cerebrospinal Fluid Tests: 3 of which 0 were positive.	
Number and Results of Bacteriological Tests for Gonococci: 3,057 of which 706 were positive.	
Number and Results of Cultures taken for Gonococci: 2,093 of which 351 were positive.	
Total Number of Patient Visits	19,147
Total Number of New Admissions	947
Total Number of Old Infections for Follow-up first time in Current Year—	
Syphilis	92
Gonorrhoea	93

PROVINCIAL CLINIC, Alberta Office Building, 134 - 8th Avenue, S.E., Calgary, Alberta.
Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms) ..							3	19	41	387	205		655
Acquired—Primary									2	1			3
Acquired—Secondary									1	1			2
TOTALS							3	19	41	390	207		660

Number of Cases of Syphilis—Male 3, Female 2	5
Number of Cases of Gonorrhoea—Male 406, Female 249	655
Number and Results of Serological Tests for Syphilis: 4,063 of which 124 were positive.	
Number and Results of Darkfield Examinations: 16 of which 0 were positive.	
Number and Results of Cerebrospinal Fluid Tests: 1 of which 0 were positive.	
Number and Results of Bacteriological Tests for Gonococci: 2,831 of which 746 were positive.	
Number and Results of Cultures taken for Gonococci: 23 of which 0 were positive.	
Total Number of Patient Visits	7,115
Total Number of New Admissions	890
Total Number of Old Infections for follow-up first time in Current Year—	
Syphilis	62
Gonorrhoea	0

PROVINCIAL CLINIC, 315 - 10th Street South, Lethbridge, Alberta
Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms) ..							4		33	8			45
Acquired—Tertiary (Neuro-Syphilis)									1				1
TOTALS							4		34	8			46

Number of Cases of Syphilis—Male 1, Female 0	1
Number of Cases of Gonorrhoea—Male 37, Female 8	45
Number and Results of Serological Tests for Syphilis: 423 of which 15 were positive.	
Number and Results of Darkfield Examinations: 4 of which 0 were positive.	
Number and Results of Cerebrospinal Fluid Tests: 3 of which 1 was positive.	
Number and Results of Bacteriological Tests for Gonococci: 103 of which 36 were positive.	
Number and Results of Cultures taken for Gonococci: 0 of which 0 were positive.	
Total Number of Patient Visits	577
Total Number of New Admissions	51
Total Number of Old Infections for follow-up first time in Current Year—	
Syphilis	8
Gonorrhoea	3

PROVINCIAL GAOL, Fort Saskatchewan, Alberta.

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms).....							1	31	15	161			208
Acquired—Latent									2				2
TOTALS							1	31	17	161			210

Number of Cases of Syphilis—Male 2, Female 0 2
 Number of Cases of Gonorrhoea—Male 16, Female 192 208
 Number and Results of Serological Tests for Syphilis: 4,570 of which 123 were positive.
 Number and Results of Cerebrospinal Fluid Tests: 0 of which 0 were positive.
 Number and Results of Bacteriological Tests for Gonococci: 2,484 of which 75 were positive.
 Number and Results of Cultures taken for Gonococci: 2,458 of which 237 were positive.

PROVINCIAL GAOL, Lethbridge, Alberta.

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms).....							4		5				9
Acquired—Latent									1				1
TOTALS							4		6				10

Number of Cases of Syphilis—Male 1 1
 Number of Cases of Gonorrhoea—Male 9 9
 Number of Prisoners Admitted—2,452.
 Number and Results of Serological Tests for Syphilis: 1,590 of which 59 were positive.

PRIVATE PHYSICIANS REPORTING CASES

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms) ..	1			1		5	43	24	305	44	22	8	453
Syphilis (Congenital)					3	2		2		1	1		9
Acquired—Primary							1	1	5	1			8
Acquired—Secondary								2	1	1			4
Acquired—Latent							2	1	27	16	2		48
Acquired—Tertiary (Cardiovascular)									3				3
Acquired—Tertiary (Neurosyphilis)									5	1		1	7
Acquired—Tertiary (Other)										1	1		2
Type Undetermined								1					1
TOTALS	1			1	3	7	46	31	346	65	26	9	535

Number of Cases of Syphilis—Male 51, Female 31 82
 Number of Cases of Gonorrhoea—Male 371, Female 82 453
 Number of Doctors in the Province receiving Consultative Service: 116.
 Number of Doses of Bismuth distributed to Private Physicians: 25.
 Number of Vials of Penicillin distributed to Private Physicians—
 1,068 vials (3,000,000 U. Procaine G in aqueous suspension).
 5 vials (3,000,000 U. Duapen).
 Number of Tablets of Penicillin Vee Oral to Private Physicians—72 (500,000 U.).
 Number of Capsules of Terramycin distributed to Private Physicians—128 (250 mgm. per capsule).

DEPARTMENT OF PUBLIC HEALTH

NEW CASES OF SYPHILIS AND GONORRHOEA REPORTED IN ALBERTA—1957
 Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Chancroid									1				1
Gonorrhoea (All Forms)	1			1		8	139	129	1323	640	23	8	2272
Syphilis (Congenital)					3	2		4		1	1		11
Acquired—Primary							2	1	13	2			18
Acquired—Secondary								2	2	3			7
Acquired—Latent							2	2	44	23	2		73
Acquired—Tertiary (Cardiovascular)									3				3
Acquired—Tertiary (Neurosyphilis)									6	1		1	8
Acquired—Tertiary (Other)										1	1		2
Type Undetermined									1				1
TOTALS	1			1	3	10	143	138	1393	671	27	9	2396
Total Number of Cases of Chancroid—Male 1, Female 0													1
Total Number of Cases of Syphilis—Male 80, Female 43													123
Total Number of Cases of Gonorrhoea—Male 1,486, Female 786													2,272

TOTAL NUMBER OF CASES REPORTED BY VARIOUS CLINICS OF THE
 DIVISION OF SOCIAL HYGIENE

Sex	Chancroid	Syphilis	Gonorrhoea	Total
Male	1	25	1,011	1,037
Female	0	13	704	717
TOTALS	1	38	1,715	1,754

CASES REPORTED BY DOCTORS AND MILITARY AUTHORITIES

	Private Physicians	Armed Forces	Total
Syphilis	82	3	85
Gonorrhoea	453	104	557
TOTALS	535	107	642

Total Number of Cases of Chancroid Reported in Alberta	1
Total Number of Cases of Syphilis Reported in Alberta	123
Total Number of Cases of Gonorrhoea Reported in Alberta	2,272
	<u>2,396</u>

Total Number of Cases of Chancroid Reported in Alberta exclusive of Armed Personnel	1
Total Number of Cases of Syphilis Reported in Alberta exclusive of Armed Personnel....	120
Total Number of Cases of Gonorrhoea Reported in Alberta exclusive of Armed Personnel	2,168
	<u>2,289</u>

REPORT OF THE PROVINCIAL LABORATORIES

R. D. STUART, M.D., *Director*

During 1957 the Provincial Laboratories carried out 444,445 examinations, an increase of 47,512 over 1956. This increase is common to both laboratories, amounting in the Edmonton laboratory to 12%, in the Calgary laboratory to 9%. Noticeable increases were recorded in diphtheria and tuberculosis examinations and in gonorrhoea cultures at the Edmonton laboratory, in diagnostic histology at the Calgary laboratory and in antibiotic sensitivity tests at both laboratories.

Special Trends

Of particular interest is the decision of the Department of Public Health to build an extension to the Provincial Laboratory at Edmonton. This was begun in August and should be completed in about one year. The new building will provide space and facilities for the extension of Pathological and Bacteriological services especially in relation to hospital diagnostic work and to technician training. New services in relation to the diagnosis of virus infections are also planned.

The pandemic of Asiatic influenza must also be considered under this heading. A recurrence of infections with this new virus type is now a continuing probability and a trend to an increased incidence and seriousness of staphylococcal infections, referred to in previous reports, must be considered as a corollary. During the recent epidemic specimens were received from 17 patients who had died as a result of Asiatic influenza and staphylococcal pneumoniae was the terminal feature in a significant number of these deaths. The increasing importance of staphylococcal infections is also instanced in the 242 examinations recorded by the Southern laboratory for staphylococcal enteritis of infants. Dr. Shute emphasizes the value of these examinations to local practitioners.

After much discussion with the Provincial Health Units and the Division of Sanitary Engineering, it has been decided to bring the laboratory service for the bacterial examination of water supplies more directly under the control of established organizations. In future all water examinations will have to be referred to the Provincial Laboratories through established health organizations, and all laboratory reports will be sent directly to them. This will eliminate much of the confusion from the irregular and ill-controlled examinations carried out in the past for private individuals.

New or Supplementary Services

A service for the identification of the recently identified organism *Haemophilus vaginalis* was offered throughout the year. From May to December, 958 specimens were examined in

the Edmonton laboratory by Dr. Amies who had made a special study of this organism. The incidence of positives, however, was only 1.25% and physician interest was minimal. Therefore, it has been decided that the extra expenditure in time and material is unwarranted and the routine service has been discontinued.

Eighteen technicians from various city hospitals received training experience from the Edmonton laboratory. This is beginning to take the form of special courses, but, more importantly, 1957 saw the beginning of an expansion of this service to smaller hospitals outside the city. One technician from Peace River received two weeks training in special hospital bacteriology. Increased use by Provincial Hospitals of the expanded training facilities of the Provincial Laboratory is expected within the new building.

During 1957 a significant expansion occurred in the distribution of sera and vaccines. This particularly involved the Central laboratory which sent out 75,110 packages compared with 33,893 last year. Poliomyelitis Vaccine and Influenza Vaccine accounted for the greatest proportion of this increase.

Regular Services

In Pathology the increase in diagnostic histology observed by Dr. Shute has already been recorded and is paralleled by equivalent numbers in the Central laboratory under Dr. Macgregor. The continuing value of this service is indicated by the fact that in Edmonton 911 cancers were thus diagnosed or confirmed and in Calgary 384 were similarly identified.

The increase in diphtheria suggested as a trend in last year's report has been confirmed this year in the Central laboratory by the isolation of 80 strains of virulent *C. diphtheriae* as compared with 43 last year. Almost 50% of these were of the gravis type which is reputedly of greater epidemic significance. An interesting observation was made on the gradual replacement of a virulent strain by a non-virulent strain of the same type in the closed community of a Boys' Home. The decision to relax quarantine precautions, made feasible by these laboratory findings, was supported by the absence of further clinical cases.

A very large outbreak of food poisoning in Red Deer, with about 200 cases, was investigated in the Central laboratory. Owing to the acute emergency only representative specimens could be obtained for examination but of about 60 specimens received 29 were positive for *S. montevideo*.

The cultural service for the diagnosis of gonorrhoea has extended considerably in the Central laboratory, 2,509 more examinations being carried out than in 1956. With the help of newly developed techniques the percentage of total positives now diagnosed by culture has risen from 83 in 1955 to 95 in 1957. In certain institutions such as the Fort Saskatchewan Gaol the percentage now diagnosed by smear alone has fallen to 0.5%. It may soon be possible to replace by cultural methods the tedious and unreliable smear investigation. Dr. Shute records the re-opening of a similar service in the Southern laboratory and anticipates favourable results.

Staff

Dr. G. O. Bain, who had been trained first under Dr. Macgregor in this laboratory and later in the United States, was appointed to the permanent staff as Assistant Pathologist on July 1, 1957.

Dr. C. E. Iland who took up the post of Senior Assistant Bacteriologist on February 1, 1957 resigned at the end of May and returned to Britain. No replacement has yet been found. Considerable help, however, has been given by Dr. M. E. Williams, a British bacteriologist on a temporary one-year appointment.

TABLE 1
EXAMINATIONS PERFORMED IN THE PROVINCIAL LABORATORIES
Year 1957

CONTROL OF COMMON INFECTIONS

	Edmonton	Calgary
Diphtheria	6,287	1,296
Enteric-Dysentery	5,486	2,517
Fungus Infections	2,117	126
Intestinal Parasites	263	85
Naso-pharyngitis	9,982	1,569
Tularaemia Serology	1,721	897
Tuberculosis	11,298	2,157
Undulant Fever Serology	1,721	897
Whooping Cough	24	24

OTHER DIAGNOSTIC AND MISCELLANEOUS

Animal Inoculations (other than T.B.)	285	11
Antibiotics etc. Sensitivities—disc	114,191	23,110
tube	23	.....
Blood Cultures	1,291	176
Leptospirosis	44	.....
Miscellaneous	16,001	3,757
Paul Bunnell Test	924	262
P.M. Bacteriology	227	.....
Referred Cultures	262	9
Special Investigations	7,007	28
Trichomonas	6,133	243
Virus Infections	394	.....

VENEREAL DISEASE CONTROL

Chancroid etc.	4	.....
Gonorrhoea—Smears	12,187	6,273
Cultures	6,408	284
Syphilis	119,809	36,679

SANITARY BACTERIOLOGY

Food Products	28	10
Milk and Cream	3,152	1,938
Water	6,147	5,643
Utensils	2	263

PATHOLOGY

Diagnostic Cytology—blood smears	213	125
bone marrows	139	19
fluids	315	484
Routine Diagnostic Histology—specimens	13,712	5,575
Routine Diagnostic Autopsies	403	6
Medico-legal Autopsies	73	.....
Referred Diagnostic Histology	22	1
Pregnancy Diagnosis—Frog Test	640
Rabbit Test	46

TOTALS	348,981	94,464
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TABLE 2

CONTROL OF ENTERIC-DYSENTERY INFECTIONS

EXAMINATIONS	Edmonton	Calgary
Blood and Clot Cultures	1,726	910
Faeces Cultures	1,824	677
Urine Cultures	43	30
Other Examinations	32	.....
Serological Tests	1,810	897
DETAILS OF ISOLATIONS		
SALMONELLA		
S. typhosa	20	7
S. paratyphosa B	2	1
S. typhi-murium	38	3
S. montevideo	27	7
S. heidelberg	5	2
S. thompson	6	.....
Other Salmonellae	4	19
SHIGELLA		
Shigella sonnei	61	8
Shigella flexneri	11	3
Shigella boydii 2	3	.....

TABLE 3

CONTROL OF TUBERCULOSIS

EXAMINATIONS		Edmonton	Calgary		
Microscopic		5,893	992		
(positive)		(319)	(21)		
Culture		3,499	804		
Animal Inoculations		2,422	361		
SPECIMENS		No.	Positive	No.	Positive
Pulmonary	4,231	385	717	13	
Meningeal	70	10	20	
Renal	639	64	304	7	
Other	310	43	180	1	

TABLE 4

CONTROL OF SYPHILIS

BLOODS	Edmonton	Calgary
Examinations—Presumptive Kahn	95,032	29,641
Standard Kahn	9,921	2,875
Quantitative Kahn	797	185
Wassermann (Kolmer)	12,581	3,079
CEREBRO-SPINAL FLUIDS		
Examinations—Wassermann (Kolmer)	1,478	899
Blood and Cerebro-spinal Fluid "positive" to reaction	620	159
Blood and Cerebro-spinal Fluid giving reaction below lab. diagnostic level	1,609	700
PRE-MARITAL BLOODS		
Positive to reaction	11,935	8,068
	12	7

TABLE 5

SANITARY CONTROL MILK AND CREAM

	Edmonton	Calgary
MILK AND ICE-CREAM (No. of specimens)	1,821	772
Coliform Test	974	573
Plate Count	1,699	772
Phosphatase	239	329
Butter Fat	233	250
Milk-bottles etc.	7	14

TABLE 6

SANITARY CONTROL WATER

	Edmonton	Calgary
WATER (No. of specimens)	3,999	2,565
Coliform Test—Presumptive	2,158	1,506
Confirmed	1,064	1,266
Special	777	327
Plate Count	2,148	2,544
Waters found Bacteriologically Unsuitable	423	962

TABLE 7
SERA AND VACCINES DISTRIBUTED

(All supplied by Connaught Laboratories unless otherwise noted)

IMMUNIZING AGENTS		Edmonton	Calgary
Diphtheria—Diluted Diphtheria Toxoid—1 person	2½ c.c. reactors	51	13
Schick Test Toxin—25 person		400	284
Toxoid—1 person		476	350
6 c.c.		163	149
Diphtheria Combined—Diphtheria and Pertussis—1 person	9 persons	303	457
		114	150
Diphtheria, Pertussis and Tetanus—			
1 person	7,817	5,152	
9 persons	3,529	1,314	
Diphtheria and Tetanus—1 person	963	809	
9 persons	1,201	396	
Enteric—Typhoid-Paratyphoid—1 person	1,044	354	
10 c.c.	1,058	346	
Enteric combined—T.A.B.T.—3 c.c.	729	652	
25 c.c.	87		
Measles—Anti-Measles—5 c.c.	2,761	2,541	
Immune Serum Globulin—2 c.c.	3,002		
5 c.c.	3,449		
Rocky Mt. Spotted Fever (Lederle Lab.)—3 c.c.	5	12	
50 c.c.	5	5	
Smallpox—1 point	4,070	2,995	
10 point	4,655	2,713	
Staphylococcal Infection—Staphylococcus Toxoid—2 c.c.	646	376	
Tetanus—(see Diphtheria and Enteric combined)—			
Tetanus Toxoid—1 person	508	410	
Whooping Cough (see Diphtheria combined)—Pertussis			
Vaccine—1 person	225	244	
9 persons	27	44	
Vaccines, Other—Autogenous Vaccine (Prov. Lab.)—25 c.c.	65	20	
Rabies Vaccine—14 c.c.	27		
Poliomyelitis Vaccine	32,916		
Influenza Vaccine	1,512		

THERAPEUTIC AGENTS

	Edmonton	Calgary
Diphtheria—Antitoxin—1,000 units	457	55
10,000 units	166	50
20,000 units	128	45
Gas Gangrene—Antitoxin—10,000 units	499	306
Scarlet Fever—Antitoxin—3,000 units (syringe)	20	
9,000 units (vial)	6	
Snakebite Antivenin—(John Wyeth & Bros. Ltd.)—15 c.c.	15	
Staphylococcus—Antitoxin—10,000 units	3	
20,000 units	9	6
Tetanus—Antitoxin—1,500 units	140	20
10,000 units	1,615	1,927
20,000 units	156	38
	88	29

TABLE 8
MINIMUM COMMERCIAL VALUE ASSESSED FROM RECOMMENDED
PROVINCIAL SCALES

Examination	Edmonton	Value	Calgary	Value	Total
Diphtheria	6,287	\$ 6,287	1,296	\$ 1,296	\$ 7,583.00
Enteric-Dysentery	5,486	10,972	2,517	5,034	16,006.00
Fungus Infections	2,117	6,351	136	378	6,729.00
Intestinal Parasites	263	263	85	85	348.00
Naso-pharyngitis	9,982	9,982	1,569	1,569	11,551.00
Tularaemia Serology	1,721	860	897	448	1,308.00
Tuberculosis	11,298	22,596	2,157	4,314	26,910.00
Undulant Fever Serology	1,721	860	897	448	1,308.00
Whooping Cough	24	48	24	48	96.00
Animal Inoculations (other than T.B.)	285	855	11	33	888.00
Antibiotics etc. Sensitivities—disc	114,191	22,838	23,110	4,622	27,460.00
..... tube	23	23	.....	.....	23.00
Blood Cultures	1,291	2,582	176	352	2,934.00
Leptospirosis	44	88	.....	.....	88.00
Miscellaneous	16,001	16,001	3,757	3,757	19,758.00
Paul Bunnell Test	924	1,848	262	524	2,372.00
P.M. Bacteriology	227	454	.....	.....	454.00
Referred Cultures	262	786	9	27	813.00
Special Investigations	7,007	21,021	28	84	21,105.00
Trichomonas	6,133	6,133	243	243	6,376.00
Virus Infections	394	no charge allocated	.....	.....	.....
Chancroid, etc.	4	8	.....	.....	8.00
Gonorrhoea—Smears	12,187	12,187	6,273	6,273	18,460.00
..... Cultures	6,408	6,408	284	284	6,692.00
Syphilis	119,809	239,618	36,679	73,358	312,976.00
Food Products	28	56	10	20	76.00
Milk and Cream	3,152	6,304	1,938	3,876	10,180.00
Water	6,147	12,294	5,643	11,286	23,580.00
Utensils	2	4	263	526	530.00
Diagnostic Cytology—blood smears....	213	426	125	250	676.00
..... bone marrow....	139	278	19	38	316.00
..... fluids	315	945	484	1,452	2,397.00
Routine Diagnostic Histology—specimens	13,712	68,560	5,575	27,875	96,435.00
Routine Diagnostic Autopsies	403	10,075	6	150	10,225.00
Medico-legal Autopsies	73	7,300	.....	.....	7,300.00
Referred Diagnostic Histology	22	220	1	10	230.00
Pregnancy Diagnosis—Frog test	640	3,200	.....	.....	3,200.00
..... Rabbit test	46	230	.....	.....	230.00
TOTALS	348,981	498,961	94,464	148,660	647,621.00

DIVISION OF SANITARY ENGINEERING

H. L. HOGGE, B.Sc., P.ENG., *M. E.I.C., Director*

Prevention of disease by the control of environmental factors is the main function of the Division. The activities are carried out in four sections, i.e. Municipal Engineering, Stream Sanitation, Plumbing Inspections and Sanitary Inspections.

The Municipal Engineering section checks the design and installation of new waterworks, sanitary sewerage and storm sewer systems, and the extensions to existing systems. They carry out inspections of systems and assist in system operation both by on the spot advice and by conducting two three-day "operator schools" each year.

The Stream Sanitation section maintains periodic checks on the quality of the water in the rivers of the province and evaluates the probable effect on a river of the waste from a proposed industry. Periodic checks are also made of the waste waters from existing industries in the province. It was significant that the "activated sludge" sewage treatment plant in Edmonton was in operation by the fall of 1957.

The Plumbing Inspection service provides inspection of plumbing installations in areas not under local inspection. They also assist local municipal inspectors on request and arbitrate referred disputes between local inspectors, plumbing contractors and owners. Inspection of plumbing in large industries and in "motel" installations was increased in 1957.

Provincial Sanitary Inspectors serve the portions of the province which are not included in "Health Units". Inspections are made of restaurants and other food handling establishments, dairy farms, milk plants, waste disposal grounds, construction and logging camps, trailer coach parks and complaints are investigated. Assistance is given to individual Health Units on request and investigations are made of appeals from Health Unit rulings.

The activities of the Division during 1957 are outlined below by section.

MUNICIPAL ENGINEERING

Much of the time spent in this field was devoted to checking design plans for new waterworks and sewerage systems and extensions to existing systems. Some time was given to the operation of existing systems in the form of assistance to the operators, i.e., by holding schools for operators and making suggestions on the spot during routine inspections of some of these systems.

The operator's school was provided for all operators of waterworks or sewerage systems in Alberta who wished to take advantage of it. The school was set up on a three-year program

of which the first and second year courses were given in 1957. The plan is to rotate the three courses in a manner that will enable a town foreman to take all three courses in three years. Of the three courses given two would be held each year. The attendance at the two courses given in 1957 was approximately 90 and the interest shown by the men indicated that they should be continued.

The help given to the operators in the field has not been extensive but is definitely valuable. It was obvious during inspection trips which operators had attended our schools. As a general rule the good operators had attended one or more of our schools.

A number of sewage disposal plants were checked for efficiency during 1957 and in each case the results were reported to the secretary-treasurer. They were also advised whether or not the facilities were adequate and suggestions were made for improved operations.

Construction figures of new systems were up over 1956 while work on extensions showed a marked decrease.

The following tables are given to show the 1957 construction costs.

A. New Systems

Provisional			Final		
	Number	Estimated Cost		Number	Estimated Cost
Water	13	\$1,023,105.00	Water	13	\$1,166,880.00
Sewer	16	1,112,786.00	Sewer	14	893,800.00
Storm Sewer .....	.....	.....	Storm Sewer	2	372,955.00
Totals	29	\$2,135,891.00	Totals	29	\$2,433,735.00

B. Extensions to Existing Systems

	Provisional			Final	
	No.	Estimated Cost	No.	Estimated Cost	
Water Supply and Treatment	6	\$ 1,112,830.00	11	\$ 1,497,730.00	
Sewage Treatment	6	1,538,290.00	4	62,260.00	
Water Mains and Sewers	26	12,619,920.00	61	6,693,810.00	
Storm Sewers	4	3,743,900.00	4	260,550.00	
Totals	42	\$19,014,940.00	80	\$ 8,514,350.00	

The 1957 spending on extensions to existing systems was 60% of 1956 spending. However, for the same two years there was twice as much spent on construction of new systems. The figure of \$4,000,000.00 which was spent in both 1955 and 1956 for water supply and sewage treatment facilities dropped considerably in 1957. The reason this figure for 1957 was only \$1,559,990.00 is because the cities of Edmonton and Calgary had finished the main extensions to their water and sewage treatment plants.

The big spenders in water and sewage works were naturally the larger centres of the province. Edmonton spent \$4,029,900.00, Lethbridge \$1,098,000.00, Jasper Place \$855,900.00, Red Deer \$659,900.00 and Calgary an estimated \$7,000,000.00 covered by provisional certificates.

The number of urban municipalities in Alberta which had water and/or sewer systems installed at the end of 1957 was 186.

Of these 168 had waterworks systems serving a population of 665,820 (1956 census), 59.2% of the provincial census and 172 had sewerage systems serving 666,426 people (1956 census) or 59.3% of the province. It is interesting to note also that 44 of these communities have a population of less than 400.

STREAM SANITATION

The periodic checks of the main rivers and review of proposed new industries was continued in 1957.

The quality of the water in the North Saskatchewan River was noted as being improved over that of recent years. The effect of industrial wastes was local to a few miles below Edmonton and although dissolved oxygen was depleted in the winter season at the first of the year, this was not so at the end of the year. This latter improvement mainly resulting from the operation of the new activated sludge section of Edmonton's main sewage treatment plant. Some further improvement in the methods of operating this plant are still to be effected, however the improvement on the river was quite appreciable in 1957.

The Bow River was still receiving raw sewage at Calgary at the year end, however the new "primary plant" will be in operation in February of 1958.

Tests on the Oldman River showed appreciable B.O.D. loads in the fall and indicate the desirability of having further information on this.

The South Saskatchewan River below Medicine Hat shows very low levels of pollution.

Studies and checks were also made of the Athabasca River downstream from the sulphate pulp mill at Hinton. Dissolved oxygen was not decreased appreciably. Odors of the effluent were noticeable for some 350 miles downstream, but not at a check point 420 miles downstream.

SANITARY INSPECTION

For the first time in the last several years no compulsory milk pasteurization by-laws were passed in the province. There are 38 such by-laws in effect in urban municipalities. A milk pasteurizing plant was installed in the Bowden Institute during 1957. This brings the number of plants supplying to schools and institutions to seven. No other new plants were established so that at the year's end the number of pasteurizing plants supplying milk to the public remained at 83.

The reports on samples obtained at milk pasteurizing plants and submitted to the Department of Agriculture, Dairy Branch Laboratory, were reviewed in the Division office. This review indicated that the operations of many of the plants were not always entirely satisfactory. In view of the dangers which may be associated with unsafe milk and the public reliance on pasteurized milk, it should not be unreasonable to expect that the operations of these plants should always be entirely satisfactory.

One meat canning plant was operated under the Provincial Board of Health Regulations for such establishments and was granted a renewal license. This plant was operated under the immediate supervision of the Local Board of Health of the City of Edmonton with co-operation from the Division of Sanitary Engineering.

Nine cemeteries completed the establishment procedure provided in the Cemetery Regulations and received Final Certificates of Approval. As part of the procedure the locations were inspected by the Health Unit concerned or by a Provincial Sanitary Inspector. The Division co-operated closely with the Department of Highways and individual Municipal Districts in regard to locations adjacent to provincial highways and district roads.

Survey plans for waste disposal grounds being established by municipalities throughout the province were referred to the Division by the Surveys Office of the Department of Highways. This co-operation made possible the inspection of the locations by the Health Unit concerned or by a Provincial Sanitary Inspector in cases where this had not already been done. In this way it was possible to ensure that new waste disposal grounds were established in suitable locations.

Local Boards of Health issued 11 restaurant closure orders during the year. This compares with 14 issued in 1956. In 7 cases (10), the required changes were made during the seven day waiting period and therefore the restaurant did not actually close. In one of the remaining cases (3) the improvements were made after closure and the restaurant was permitted to re-open. Three (1) were still closed at the year's end. (The figures in brackets are the comparative figures for 1956.)

The Division of Sanitary Engineering continued to employ three Provincial Sanitary Inspectors during the year. The service was reorganized early in the year when the Calgary office was closed and the Inspector moved to Edmonton. The extension of health unit services in the southern part of the province culminating in staffing of the Chinook Health Unit in 1957 made this change possible. The change in the Division's organization has made possible more balanced service to all parts of the province.

The Provincial Sanitary Inspectors continued the program of previous years designed to assist Local Health Authorities in dealing with sanitation matters. In all 1267 inspections were made which may be compared with the 1050 made in 1956. The increase may be attributed to the special services provided in the Hinton and Drayton Valley districts in the first half of the year. In these cases unusual numbers of inspections could be carried out without extensive travelling.

In view of the extensive outbreak of bacillary dysentery which had occurred in the Hinton district in 1956 and the danger of a renewal of the outbreak in 1957, the Division provided an intensive service in the area during the first half of the year. A Provincial Sanitary Inspector was active in the area every other week from late January to late March. The service was further intensified at this point as early spring was considered the

period of greatest danger. From late March to mid-May the service was on an every week basis. In mid-May a return was made to the every other week basis which was continued until early July when the newly formed Edson Health Unit took over.

The activities of the Provincial Sanitary Inspectors employed in the Hinton district were directed at food handling premises in the area. Trailer coach parks, construction camps and wood cutting camps also received close attention. The continuous efforts were rewarded by the adoption on a scale rarely realized of excellent food handling practices. Worthwhile improvements were also secured in construction and wood cutting camps and in the communal facilities in the trailer coach parks.

The large reduction in the transient population which occurred as construction at the pulp mill was completed, together with a general improvement in housing and sanitary conditions which took place in the area before the spring season, no doubt contributed to the disappearance of widespread dysentery. Nevertheless it is considered that the continuous efforts made by the Provincial Sanitary Inspectors played a significant part in the prevention of an outbreak similar to that of 1956.

The explosive growth in population in the Drayton Valley area following the establishment of an oil field in the district presented a number of sanitary problems. It appeared a Sanitary Inspector was needed in the area on a full-time basis. The staff of the Health Unit concerned was not large enough for this. The Division therefore stationed one of its Inspectors at Drayton Valley during the months of March, April and May. Frequent inspections were made in the trailer coach parks, industrial camps, restaurants, food stores, etc. The special service was discontinued at the end of May as it was considered the situation was no longer abnormal. Much sub-standard housing had been replaced by permanent dwellings by that time and many workers had left the oil field due to lessened activity.

A total of 97 inspections were made at dairy farms, milk pasteurizing plants and other milk handling establishments during the year. This is a considerable reduction from the 211 inspections in these classifications in 1956. It may be accounted for by the limited staff available for these inspections through a large part of the year and also by the reduced number of milk plants and dairy farms remaining outside health units. Because several of the plants inspected by the Division in 1956 were in health units in 1957, it is not possible to make a satisfactory comparison of the results achieved in the two years. However it is noted that two of the pasteurizing plants embarked on major programs of physical improvement while lesser changes were carried out in others in 1957.

Six hundred and forty inspections were made in restaurants and other food handling establishments in 1957 compared with 420 in 1956 and 290 in 1955. The increased number of inspections may give a false impression unless considered in relation to other factors. In 1955 the restaurant inspection program was deliberately curtailed to permit an increase in dairy farm inspections and other activities of the Division. A number of the restaurant

inspections in 1956 were made in the Hinton area as part of the program to combat the outbreak of dysentery in that district. The figure for 1957 includes the intensive services at Hinton and Drayton Valley.

Another feature of the year's activities were 200 inspections in dwelling categories. These included inspections in industrial and construction camps and trailer coach parks. Many of these inspections were in the Hinton and Drayton Valley areas and have already been referred to. A number of the inspections were made in other districts usually in response to complaints. In many instances the complaints were justified at least in part. Necessary instructions for correction were given.

One hundred and sixty-six inspections of wells, other private water supplies and sewage disposal systems were made during the year compared with 87 in 1956. The open fall permitted many visits to farm homes for this purpose. These inspections were usually made as a result of requests from the users or because of unsatisfactory laboratory reports. The advice which was given was usually much appreciated by the users.

In summary the Sanitary Inspectors employed by the Division provided an intensive service in one area as a precaution to prevent the return of communicable disease. In another area affected by sanitary problems brought on by industrial growth, a special service was provided. In addition the Provincial Sanitary Inspectors provided limited coverage of the more important matters in the field of sanitation throughout the parts of the province not served by city health departments or health units.

PLUMBING INSPECTION

The amount of plumbing which has been installed each year has shown a steady increase and 1957 was no exception to this upswing. The number of plumbing fixtures installed during 1957, as reported, indicates an increase of approximately 5% over 1956. The total number of fixtures installed was 69,598 which represents approximately 14 million dollars worth of plumbing installed during 1957. The number of individual types of fixtures installed was as follows:

Water Closets	18,601	Lavatory Basins	19,534
Baths	10,654	Sinks	11,977
Laundry Tubs	1,927	Special Fixtures	6,905

The number of privies eliminated through the installation of plumbing was 1,185.

During the calendar year this office issued 204 plumbing permits at a value of \$2,274.90.

A refresher course for local plumbing inspectors was held in Red Deer during the week of April 8th to 12th and was attended by 27 inspectors representing towns and villages throughout the central and southern section of the province.

The Plumbing Inspectors of this Division lectured at a number of short courses as arranged by the Department of Agri-

culture, Division of Extension, for the benefit of farmers and urban dwellers. These courses were very well received and it is felt that the calibre of plumbing and private sewage disposal systems as installed by individuals and which does not come within the scope of the Provincial Plumbing and Drainage Regulations will be greatly improved.

This branch has devoted considerable time assisting plumbers and individuals with the design of a sewage collection system for trailer parks and in a number of cases has saved the owner considerable expense.

During the year it was necessary to arbitrate disputes between local inspectors and plumbing contractors. It was also necessary that assistance be given to local plumbing inspectors with regard to the inspection of large plumbing installations within their inspectorate.

The water consumption project which was commenced in 1956 was completed this year and it was very successful. It was learned that buildings such as schools require a large amount of water to be available for peak demand periods such as at recess or at the lunch hour. This water requirement can be satisfied if the well is capable of meeting the demand or if a cistern is included in the design of the plumbing system. The project also supplied information with regard to the pressure tank size necessary for the proper operation of a school water supply system.

The ground temperature measuring project which was commenced in 1956 was also completed in 1957 but this project was not as successful as was our hope at the time the project was started. We did learn some important facts from this project which will be of considerable value should a similar project be undertaken in the future.

It was noticed that the type of septic tank most commonly installed during 1957 was of the pre-cast concrete or the poured-in-place concrete type. This trend is probably due to such factors as the availability of pre-cast septic tanks as well as the availability of septic tank forms on loan from municipal offices. It is believed that this is a favorable trend and will result in a much more satisfactory system whose life will be considerably longer than if steel septic tanks had been used.

CIVIL SERVICE NURSE

K. E. JORGENSEN, R.N.

The year of 1957 brought the highest number on record for office and home calls.

The Asian 'flu which was at its peak in October was accountable for a very large increase. The home call requests for that month were more than double any other on record. The severity of the illness was greater in most cases and as a result the doctors were frequently called. We assisted Dr. Orford-Smith in giving 101 'flu vaccine inoculations.

The number of allergy cases has increased. Many with lingering respiratory effects, and many skin conditions.

The nervous and mentally ill patients also appear to be increasing in number. These cases take a great deal of our time regardless of them being under medical care and treatment.

We patch test the working contacts of active tuberculosis cases found in the service. We also patch test cases where symptoms would indicate it advisable.

The major accidental, the acutely ill and the communicable cases are generally given transportation, as their doctor requests. I either drive them to hospital, doctor's office or home if an ambulance is not necessary. There was a total of 87 cases this year.

The branch submits to the various departments "certificates of illness" for staff. In some cases the Heads of Departments request a certificate for a one-day absence (this depends on the individual) but as a rule one is asked for if the illness exceeds 3 days and not more than 6 days or involves a holiday. Some doctors dislike giving certificates—in such cases I have it confirmed by him by phone and write on the certificate the doctor's name who attended.

The following report will show the monthly figures for 1957 and the total figures for 1956 and 1957.

	Office Calls	Home Calls	Comp.	Certificates
January	533	72	17	47
February	481	41	12	28
March	467	37	10	17
April	409	38	10	22
May	456	31	7	17
June	436	26	19	14
July	408	27	11	13
August	389	27	12	14
September	449	58	21	17
October	680	201	9	127
November	524	52	17	58
December	344	42	10	19
1957	5,576	652	155	393
1956	5,310	498	196	

DIVISION OF ARTHRITIS SERVICES

R. K. THOMSON, M.D., *Director*

The Division of Arthritis, Department of Public Health, with Clinics in Alberta Jasper Building, Edmonton, and Holy Cross Hospital, Calgary, accepts patients up to the age of twenty-five years.

For the year 1957, the number of new patients and repeat patients is slightly lower than the average figure for the preceding few years. No conclusions can be drawn from this lower figure for one year, but it is still apparent that adequate early treatment is reducing long hospital stay and degree of permanent disability. It is again noted that the majority of patients who have reached the age of ineligibility are not requiring long hospitalization because they have reached the stage of stability which permits them to retain routines at home and under their private physicians.

There has been a further reduction in total hospitalization and this further strengthens the impression of former years that early and active care of the Rheumatoid Arthritic youngster reduces the overall cost to society by diminishing the need for hospitalization, and particularly long-term hospitalization care.

The provision of newer hormone preparations such as varieties of Cortisone and Hydrocortisone have been of material benefit to many patients. Where they are necessary, they would ordinarily mean prohibitive expense to many of the patients, and under the present system there is no deterrent to their necessary use. It is notable, however, that all patients do not receive these hormone preparations. They still remain a useful adjunct to the basic treatments in Rheumatoid Arthritis. The basic treatment consists of education of the patient plus the following of more simple routines involving rest and exercises and physiotherapy. It is still the experience of the Clinic that the distribution of these hormones by the Clinic has permitted better control and consultation with regards to their use.

STATISTICAL COMPILATION OF CASES TREATED IN 1957

	Edmonton	Calgary	Total
Initial examinations made	17	14	31
Repeat examinations made	153	30	183
Rheumatoid Arthritis cases in 1957—new	12	11	23
Total Rheumatoid Arthritis cases under the Division of Arthritis	98	43	141
Hospital Days	194	61	255
Physiotherapy treatments	171	119	290
Injections	27	33	60
Office Visits	16	78	94

TREATMENTS

January 1st to December 31st, 1957

Hospital Days	255
Clinic and Office Visits	308
Physiotherapy	290
Other: Including surgical, injections and special procedures.....	69
TOTAL TREATMENTS	922

DIVISION OF CEREBRAL PALSY CLINICS

F. G. DAY, M.D., *Director*

In 1957 the Cerebral Palsy Clinics in Calgary and in Edmonton continued to function on a twelve month basis. A considerable number of new patients were seen and placed under a therapy regime; also therapy was continued on those older cases who had known treatment earlier.

Emphasis has been placed on advancing methods of classifying the results of therapy in both clinics under a standardized system which will be adopted in all clinics across Canada so that we may be able to show what is occurring and hence obviate the waste of time spent with those patients who do not benefit sufficiently from treatment to warrant the time and the expenditure in carrying them on.

A very interesting research program has been functioning largely on a voluntary basis to attempt to establish the age of intra-uterine development at which the various types of cerebral palsy occur. If successful, an important result of this study could be in determining what causes are actually due to preventable instances at birth and after birth. The prophylaxis of this disease could very well be where the medical profession might render the most benefit.

The program inaugurated by the Provincial Department of Public Health to assist parents in the domiciliary care of their children who are victims of Cerebral Palsy where their care at the Clinic necessitates their residence in Edmonton or Calgary has functioned extremely well to the point where it has obviated the necessity of an in-patient type of clinic in the foreseeable future.

A report elaborating our statistical accomplishments for the year 1957 follows:

Edmonton Clinic

During 1957, 53 Examining Clinics were held with a total of 511 examinations. There were 51 new cases seen with 37 diagnosed as cerebral palsied of which 3 were acquired, 3 pending further investigation, and 11 miscellaneous.

Patients on Active Treatment

There were 116 cerebral palsied cases that benefited from treatments on a rotating basis. Of these, 44 were new cases and 15 were children who were excused from the regular school hours, opportunity classrooms, or attended after school hours. The average monthly number of cases who received treatments or instructions throughout the year was 44.

Physiotherapy

The total number of treatments given during the year has been 3,093 with 78 different cases being seen.

*Progress**Balance:*

- 3 showed improved co-ordination and concentration
- 2 achieved balance on all fours (prior to crawling)
- 6 achieved balance in sitting

Walking:

- 3 progressed to walking with help (unbraced)
- 2 progressed to walking in walker
- 2 progressed as far as walking in bars
- 2 progressed as far as walking with use of crutches
- 5 progressed as far as walking with use of canes
- 4 progressed as far as walking unaided.

General improvements:

- 5 showed minor gait improvement
- 18 showed considerable gait improvement
- 26 had deformities reduced
- 9 gained better group muscle control
- 3 gained improvement of general muscle control
- 1 showed minor activity increase
- few made progress in several (directions)
- 10 showed no progress

Bracing:

- 10 were braced for control for the first time
- 4 had bracing reduced
- 4 had bracing removed.

Occupational Therapy

The Occupational Therapist has seen 62 different cases and given 1,583 treatments. Average number of cases benefiting from monthly treatments was 14. Of this total, 47 were learning mainly self-help skills of feeding and dressing. The majority of this group were learning dressing skills only. All showed improvement but due to the young age group learning this particular skill, none have, as yet become completely independent.

16 showed improvement in feeding skills:

(a) Total independence	3
(b) Improvement	12
(c) No improvement	1

Special skills: 6

(a) Floor loom	1
(b) Writing skills	1
(c) Typing skills	1
(d) Electric sewing machine	3

*Following Surgery: 6**Speech Therapist*

A total number of 42 cases were treated during 8 months in 1957 that we had the services of a Speech Therapist. Total treat-

ment sessions were 1,583, with a monthly average of 18.2 cases being seen.

Respirator therapy was carried out in 8 cases (athetoids).

Three hearing aids were fitted and one child gained admittance to the School of the Deaf, one child discharged from School of the Deaf and resumed treatment.

School

Children at the Cerebral Palsy Clinic School include those of pre-school as well as school age.

Fifty-nine attended during the year for periods varying from 1-5 months; of these eighteen were under six years of age, eight showed advancement academically and socially; the remaining ten have not the mental ability to concentrate when in a group.

There were 19 in the Reading Readiness category; 9 were successfully promoted to Grade I, 6 of them to regular schools and 3 were being taught at home by the Roving Teacher. The remaining ten having severe handicaps making them slow learners.

Instructional testing was carried out with these children and records kept of their abilities and achievements.

Ten children attending regular schools in this area of Alberta were taught supporting activities at Grade I level, the work being remedial. Similarly 4 children in Grade II received remedial instructions and in all cases the regular classroom teachers co-operated to assist in this work. These teachers also sent reports on the children's problems and progress to the Clinic before and after their attendance here. Two severely handicapped girls completed Grade II in the Clinic class. The other six pupils attended for regular school work one each in Grade III, IV, VI, VIII for one month each while receiving therapy; and two in Grade VI for 5 months.

Patients on Home Management: 100

Correction or application of orthopaedic appliances	51
Surgery	6
Referred to the Organization for Retarded Children	1
Referred to Provincial Training School at Red Deer	15
Admitted to School for the Deaf	1
Re-admitted from School for the Deaf	1
Transfer to Calgary	1
Moved out of the Province	3
Deaths	2

Braces:

Bilateral long leg braces with knee locks and back support	2
Bilateral long leg braces with knee locks and pelvic band	6
Bilateral long leg braces with knee locks and ball bearing joints	1
Bilateral long leg braces with knee locks	12
Unilateral below knee braces	21
Unilateral below knee night braces	8
Unilateral long leg night braces	13
Casts	6
Pelvic bands	2
Twisters	3
Jury mast	1
Fibreglass cock-up splints	10
Fibreglass supination splints	2
Arm braces	1
Shoulder splints	4
Shoe corrections	76
Repairs or adjustments	67

INSTRUCTIONS AND FILM "A DAY IN THE LIFE OF A CEREBRAL PALSY CHILD"
SHOWN TO:

- 113 Student Nurses
- 17 Second-year Physiotherapy Students
- 16 Public Health Nursing Students from University of Alberta
- 20 Beta Sigma Phi Xi Chapter members

INSTRUCTIONS TO:

- 1 Teacher
- 1 University Student
- 3 Medical Officers from Health Units
- 7 Public Health Nurses

LECTURE BY DOCTOR AND FILM, "A DAY IN THE LIFE OF A CEREBRAL PALSY CHILD":

- Public Health Nursing Students from University of Alberta
- Student Nurses at Royal Alexandra Hospital
- First and Second Year Physiotherapy Students

CALGARY CLINIC:

During 1957, 43 clinics were held with a total of 202 examinations. There were 43 new cases seen with 36 diagnosed as cerebral palsied, 3 pending further investigation and 4 miscellaneous.

Patients on Active Treatment:

There were 78 cerebral palsied cases that benefited from treatments on a rotating basis. Of these, 24 were new cases and 54 were re-admissions. The average monthly number of cases who received treatments or instructions through the year was 36.

Physiotherapy:

The total number of treatments during the year has been 3,351 with 67 different cases being seen. The monthly average benefiting was 27.

Progress:

Number who progressed	37
No progress	25
Regressed	5

Occupational Therapy:

The Occupational Therapist has seen 64 different cases and given 3,141 treatments. Monthly average benefiting was 23.

Progress:

Number who progressed	54
No progress	7
Regressed	3

Speech Therapy:

A total number of 55 cases were treated during 1957. Total sessions were 3,174, with a monthly average of 23 cases being seen.

Progress:

Number who progressed	47
No progress	8

School:

The Calgary Public School Board supplied the services of a school teacher during 10 months of the year. Total instructions were 1,815 with 34 cases benefiting and average monthly attendance 18.

Ungraded	11	Grade III	3
Grade I	14	Grade IV	3
Grade II	3		

Patients on Home Management: 120

Surgery	7
Referred to School for the Deaf	1
Referred to Provincial Training School at Red Deer	6

Braces:

Bilateral long leg braces	4
Unilateral short leg braces	6
Unilateral Perlestein type night splints	16
Bilateral Perlestein type night splints	1
Bilateral gutter type night splints	2
Buttock support	1
Hand splints	2
Wrist splints	2
Wrist cuffs and belts	4
Special chest and spinal brace	1
Brace adjustments and repairs	71
Shoe corrections	46

Instructions:

Student Nurses	232
Public Health Nurses	33
Medical Health Officer	1
High School Students	47
Physiotherapy Internes	6
Parent education programs by the staff	2
Parents (other than those receiving any instruction at examination clinics)	78
Film "A Day in the Life of a Cerebral Palsy Child"	23

STATISTICAL SUMMARY

	Edmonton	Calgary	Total
Number of Clinics	53	43	96
Total Examinations	511	202	713
For Diagnosis	51	43	94
For Review	460	159	619
Cases on Active Therapy	116	78	194
New Patients	44	24	68
Re-admissions	72	54	126
Cases receiving Physiotherapy	78	67	145
Cases receiving Occupational Therapy	62	64	126
Cases receiving Speech Therapy	42	55	97
Cases receiving Schooling	59	34	93
Cases on Home Management	100	120	220
Cases receiving Domiciliary Allowance	29	19	48
Total days Domiciliary Allowance	2,658	1,618	4,276
Total days	2,658	1,618	4,276

DIVISION OF TUBERCULOSIS CONTROL

G. R. DAVISON, M.D., *Director*

The almost miraculous decline in the tuberculosis mortality rates, and the remarkable recoveries brought about by the development of drugs and resultant progressive improvement in surgical techniques is an impressive tribute to medical science. For 1956 the Alberta's death rate of 3.8 per 100,000 was the lowest provincial rate in Canada. For 1957, however, the tentative rate is over five.

Although it is true that the tuberculosis death rate is at an all time low, we must keep in mind that the number of new active cases discovered each year has not shown any phenomenal decline. In 1954—494 active cases were discovered. In 1955—482. In 1956—500, and 1957—565. The 1957 figures are not a true picture, as they include forty-six (46) Hungarian refugees. Forty-one (41) more refugees were classed as inactive. There remains a large section of the population which is infected, and unless diligently searched for, many will develop symptomatic disease with all that it entails. We must therefore view the future with guarded and sober optimism, and continue the search for those who are infected. The average number of cases admitted to Sanatoria over the four years 1953-1956 was 675. In 1957 the number was 718. When the above mentioned refugees are subtracted the previous four year average still maintains.

Clinic Services

The armamentarium in the fight to prevent and control the disease consists of stationary clinics at the sanatoria and mobile x-ray surveys of the general population in the summer seasons and surveys of the employees in industry in the winters, x-ray units in the provincial gaols to take chest films of all admissions and x-ray units in the city halls in Calgary and Edmonton, where anyone can attend. Many employers are making use of these units for pre-employment films of prospective employees. Tuberculin testing of students in the schools by the Health Units, city Medical Officers of Health, Municipal and District nurses is used. The other members of the families of students who react to the test are also tested and x-rayed. The skin testing of food handlers in the Health Units and x-raying of the positive reactors is also a part of the control program. Chest x-ray films of general hospital admissions are also used in finding cases of disease. During 1957 calendar year 172,747 people received some form of clinic service.

In the preventive field the B.C.G. Vaccination Program, which has been in force for several years, is being broadened in scope. This applies particularly to the north of the province, where the hazard is greatest. It is also advised for all infants of Indian blood extraction, and in families with long histories of tuberculosis.

Further advances toward the goal of eradication of this disease can only be achieved by the increased use of the diagnostic facilities which are available to everyone.

To make the various control programs really effective requires the assistance of all public spirited citizens in every community.

Treatment Services

The demand for sanatorium beds has shown a gradual increase over the years, but with the new drugs and advances in surgery the average stay of patients is shorter.

In 1949 the first year the non-pulmonary cases were accepted, 1,023 pulmonary and non-pulmonary cases were treated. 1951—1,059; 1953—1,156; 1955—1,201; 1956—1,184; 1957—1,206. This 1957 figure is much less when the refugees are subtracted, and gives a truer picture of the problem in the resident population. The average stay in the sanatorium has gradually decreased—1953—293.6; 1955—281.6; 1956—286; 1957—251. The incidence of disease is much less in the south half of the populated areas, consequently there are vacant beds in the Baker Memorial in Calgary, but a short waiting list persists at the Aberhart Memorial Sanatorium.

Training of Nurses and Medical Students

With the decline in contagious diseases very few nurses in training have the opportunity of a tour of duty in isolation hospitals. This lack has been partially corrected through the courses in the sanatoria for affiliate students from the general hospital training schools. At the same time they gain some insight into the various aspects of tuberculosis both from didactic and clinical teaching. Student nursing aides also receive part of their training at the sanatoria.

Medical students attend at the Aberhart Memorial on Wednesday afternoons during the session for lectures and clinics. The stress during the latter being placed on physical diagnosis. A few students who have finished their third year are attached to each sanatorium during the summer vacation.

Educational Program

Instruction to all school grades and commercial classes is given by well qualified teachers. The main objective of the classes is to carry on the education of those who were attending school at the time of admission so that they will not lose school time. In this way they will have as good a standing for their age on return to school as the other pupils. Teaching of some along certain lines with a view to their rehabilitation takes a very important place in the work also.

Occupational therapy is also an important adjunct to treatment. It is looked upon as educational rather than diversional, and sometimes is the basis for rehabilitation of the patient on discharge from hospital.

Rehabilitation is closely connected with the educational program. The rehabilitation offices of the Alberta Tuberculosis Association at the sanatoria work very closely with the school teachers and occupational therapists. The educational, occupational and rehabilitation programs are fully appreciated by everyone concerned and have proven their worth many times.

Acknowledgments

Our sincere thanks are extended to everyone who has contributed to the operation of the Tuberculosis Division and the Sanatoria.

Grateful acknowledgment is extended to voluntary organizations, branches of the British Empire Service League and private individuals who have taken such a kindly interest in the patients and have contributed to their welfare.

Our grateful appreciation is extended to the medical superintendents and the staffs of the sanatoria for their willing co-operation and valuable services throughout the year.

DIAGNOSTIC CLINIC

1. STATIONARY CLINICS	Number Sessions	New Cases of Tub. Active		Total Examinations
		Pul.	Non.-Pul.	
Baker Memorial Sanatorium	97	32	6	5,255
Aberhart Memorial Sanatorium	103	68	11	5,625
Calgary	44	....	....	169
Camrose	5	2	....	135
Drumheller	12	....	....	201
Lethbridge	12	2	....	690
Medicine Hat	12	....	....	550
Red Deer	9	....	....	310
Vegreville	5	....	....	141
TOTAL	299	104	17	13,076
OTHER CLINICS				
*Miscellaneous		193	3	8,425
Total All Clinics		297	20	21,501

In addition to the above 317 newly discovered cases of active tuberculosis there was also discovered 477 cases of inactive tuberculosis.

*Films sent in from various points and paid for by the Tuberculosis Division.

2. Tuberculin Testing and X-ray Surveys (Conducted by Public Health Nurses, Teachers, Business Firms, etc.)

	No. Tbn. Tested	No. X-rayed
Edmonton School Board .....	....	239
Public Health Nurses .....	....	28
Provincial Laboratory .....	....	123
Red Cross Blood Transfusion Service, Calgary ..	2	4
Red Cross Blood Transfusion Service, Edmonton	....	47
Nursing Aide Trainees .....	....	477
Industry and Business .....	....	379
University Students, Calgary and Edmonton	596	589
Bethany Hospital, Calgary .....	....	62
School Survey (see page 2)	16,690	1,105
Technical School, Calgary	1,240	69
TOTAL	18,528	3,122

Total number known to have been given service 20,223 i.e. number x-rayed plus number tuberculin tested, but not x-rayed.

- 2a. Number out-patient Streptomycin injections (Aberhart Memorial Sanatorium and Baker Memorial Sanatorium)—1,942.

DEPARTMENT OF PUBLIC HEALTH

2b.—SCHOOL SKIN TESTING SURVEY

	No. Tested		No. Reactors		No. X-rayed		New Cases Tub.	
	School	Contacts	School	Contacts	School	Contacts	Active	Inactive
Alberta East								
Central H.U.					45(45)	7(7)		2
Athabasca Health Unit					2(2)	4(4)	1	1
Barons Eureka H.U.	720	29	15	10	7(2)	5		2
Grade Nine, Calgary	1,527		141		141	8(8)		
Chinook H.U.					4(4)			
Drumheller H.U.					5(5)			
Edson H.U.					4(4)			
Edmonton	2,256	10	63	1	33(7)	4(4)		1
Foothills H.U.					20(20)	9(9)		1
Grande Prairie H.U.	688	33	24	4	53(50)	8(7)		1
Jasper Place H.U.	526		11		6(3)	9(2)		
Leduc-Strathcona H.U.	5,061	144	66	74	56(2)	60(1)		
Medicine Hat H.U.	1,391	46	9	10	48(42)	17(11)		1
Minburn-Vermillion H.U.					11(11)	6(6)		
Mount View H.U.					22(22)	21(21)		
New Bridgen	865	18	1		7(1)	1		
Peace River H.U.	1,532	148	95	24	108(24)	20(4)	1	3
Red Deer H.U.					5(5)			
Slave Lake	519	44	54	13	5(1)	6(2)		1
Stony Plain-Lac Ste Anne	42	13	5	7	13(13)	35(33)	1	3
Sturgeon H.U.					16(16)	15(15)		2
Sunnyside	458	5	7	1	7(2)	1		
Vegreville H.U.	113	4	2		9(8)	3(3)		1
Wetoka H.U.	341	86	27	22	185(167)	41(15)	2	1
Youngstown					5(5)			
School of Agriculture								
Fairview	71		2		1	6(6)		
Canadian Union College								
Lacombe					1(1)			
TOTAL	16,110	580	522	166	819(462)	286(158)	5	20

Figures in brackets indicate number of persons x-rayed under this program whose Tuberculin Test results have not yet been reported to the Division.

3.—MOBILE UNIT SURVEYS

3.—MOBILE UNIT SURVEYS		Number X-rayed	
Alder Flats	480	Mannville	1,748
Andrew	1,769	Marlboro	209
Athabasca	2,020	Marwayne	839
Boyle	803	Mercoal	746
Breton	759	Minburn	358
Breynat	129	Mundare	1,629
Bruderheim	588	Muskeg River	104
Buck Creek	156	Myrnam	1,406
Buck Lake	268	McLaughlin	245
Buffalo Coulee	351	McMurray	544
Calling Lake	225	Namao	1,184
Calmar	1,628	Newbrook	713
Camrose	4,652	Niton	372
Camrose (Rosehaven)	695	Paradise Valley	498
Caslan	199	Peers	480
Chipman	574	Perryvale	214
Clandonald	426	Plamondon	615
Clareholm	2,352	Radway	749
Colinton	442	Ranfurly	312
Derwent	769	Raymond	3,176
Devon	1,019	Red Deer (P.T.S.)	904
Dewberry	609	Redwater	923
Drayton Valley	1,831	Rivercourse	153
Duffield	503	Rochester	281
Edson	2,600	Seba Beach	534
Egremont	207	Smoky Lake	1,212
Entrance	98	Stavelly	712
Entwistle	533	St. Michael	333
Evansburg	638	Stony Plain	2,025
Foothills	161	Sundre	1,957
Fort Macleod	2,470	Tawatinaw	308
Genesee	311	Thorhild	1,118
Grassland	614	Thorsby	1,460
Hairy Hill	661	Tomahawk	662
Hays	425	Two Hills	1,690
Hinton	1,813	Vauxhall	1,787
Hylo	150	Vegreville	2,798
Imperial Mills	135	Vermillion	2,358
Innisfree	703	Wandering River	128
Islay	306	Warburg	837
Jasper	1,701	Warspite	500
Kitscoty	816	Waskatenau	667
Lamont	1,171	Waterways	212
Lavoy	442	Wildwood	509
Leeshore	251	Willingdon	969
Lindale	276	Winfield	717
Lodgepole	330		
		TOTAL	81,954

Industrial Mobile Unit, Calgary	6,026	Industrial Mobile Unit, Edmonton.....	2,961
Industrial City Hall, Calgary	752	Lethbridge Gaol	228
School Survey City Hall, Calgary	188	Fort Saskatchewan Gaol	1,178
City Hall, Calgary	6,299		
City Hall, Edmonton	6,923	GRAND TOTAL	106,509

SUMMARY MOBILE UNIT SURVEYS

Number X-rayed	106,509		
Probable Tuberculosis Active	75	(31 previously discovered)	
Probable Tuberculosis Inactive	552	(253 previously discovered)	
Further Examination Requested	880		
Non Tuberculosis Chest Conditions	856		
Undiagnosed (including 311 spoiled films)	313		
Pleurisy Active	1		
Pleurisy Inactive	234	(50 previously discovered)	
No Disease	103,598		

4.—SUMMARY CLINICS AND SURVEYS

	Total Number Examinations
Stationary Clinics	13,076
Other Clinics	8,425
Surveys (excluding Mobile Unit and School Surveys)	3,533
School Surveys	16,690
Mobile Unit	106,509
Department of Indian Affairs and Northern Health Services	6,756
Hospital Admission Program	17,758
TOTAL	172,747

5.—SOURCES OF DISCOVERY NEW CASES OF TUBERCULOSIS

	1956	%	1957	%
Clinics	644	56.8	794	60.7
Referred for admission, family doctor	212	18.7	204	15.6
Surveys	7	.6	5	.4
Referred by Department of Veterans Affairs or National Defence	16	1.4	17	1.3
Provincial and Hospital Laboratories	23	2.0	8	.6
Hospital Admission Films	139	12.3	107	8.2
Other Sources	10	.9	46	3.5
Department of Indian and Northern Affairs (includes 108 Treaty Indians 1957)	82	7.2	126	9.6
TOTAL	1,133		1,307	

The following table sets forth the sources of discovery giving credit to programs actually referring the cases to the Tuberculosis Clinics and for admission to Sanatorium beds for the establishing of diagnoses.

	1956	%	1957	%
Family Doctor	386	34.1	396	30.3
Mobile Unit	111	9.8	131	10.0
Hospital Admissions	151	13.3	133	10.2
Contacts	127	11.0	108	8.3
Department of National Health and Welfare	70	6.2	79	6.0
School Surveys	28	2.5	25	1.9
Department of Indian and Northern Affairs	101	8.9	124	9.5
Surveys (Business, Hospitals, etc.)	7	.6	30	2.3
Department of Veterans Affairs and National Defence	25	2.2	21	1.7
Provincial and Hospital Laboratories	21	1.9	11	.8
Old Age Pension Survey	6	.5	...	...
X-San Other Provinces or Countries	88	7.8	74	5.7
Hungarian Refugees .....	...	...	87	6.7
Other Sources	12	1.1	49	3.7
Gaol .....	...	...	9	.6
City Hall Units .....	...	...	30	2.3
TOTAL	1,133		1,307	

6.—CLASSIFICATION OF NEW CASES OF ACTIVE AND INACTIVE TUBERCULOSIS

Minimal	622	
Moderately Advanced	252	
Far Advanced	79	
Primary	93	
Tuberculosis Pleurisy with effusion and evidence of previous pleurisy	156	
Non-Pulmonary Tuberculosis	105	
TOTAL	1,307	
Number newly discovered cases active tuberculosis	565	
Number newly discovered cases inactive tuberculosis	742	
Number of cases reactivated	55	
Number of non-residents diagnosed tuberculosis (includes 79 immigrants and 87 Hungarian Refugees)	178	
Number known contacts of newly discovered cases	2,155	
Number known contacts checked	1,636	75.9%

DEPARTMENT OF PUBLIC HEALTH

OLD TUBERCULIN 1957

	Number of Bottles Sent	
	BMS	AMS
Dilution No. 2	133	30
Dilution No. 3	795	406
Dilution No. 4	37	....
	965	436

In addition to the above, Patch Tests were sent to Health Units, Municipal Nurses and Family Doctors upon request. The Tuberculosis Division recommends, however, that the Mantoux Test be used as often as possible in preference to the Patch Test.

B.C.G. VACCINATIONS 1957

1. Nurses (a) Graduates	3
(b) Students	534
(c) Other Nursing Personnel	1
2. Other Hospital Personnel	38
3. All Other Persons (a) Newborn Contacts	13
(b) Adults and Children, Contacts	30
(c) Adults and Children, Not Contacts	106
TOTAL	725

INSTITUTIONAL REPORT

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium
Patients under treatment January 1, 1957	220	268
Number admitted during 1957	322	396
Number transferred in during 1957	1	2
Number treated during 1957	543	666
Number discharged or died during 1957	355	409
Number transferred out during 1957	2	1
Number discharged, transferred out or died 1957	357	410
Number of patients under treatment December 31, 1957	186	256
Number of patients under treatment in Alberta January 1, 1957		488
Number of admissions during 1957		718
Number of patients treated in Alberta during 1957		1,206

DIAGNOSIS OF PATIENT ADMISSIONS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium
Non-tuberculous	0	17
For diagnosis	73	19
Pleural effusion	6	9
Tuberculosis inactive	35	11
Primary tuberculosis	13	45
Non-pulmonary tuberculosis:		
Bone	4	10
Genito-urinary	11	16
Adenitis	10	14
Addison's Disease .....	...	1
Pelvic	5	9
Meningitis	2	6
Abscess	1	1
Erythema induration .....	...	1
Taeniosynovitis .....	...	2
Skin .....	...	2
Bursitis .....	...	1
Pulmonary tuberculosis active:		
Minimal	44	47
Moderately advanced	66	122
Far advanced	51	58
Millary	1	5
TOTAL	322	396
Number with positive sputum on admission	64	89
Number with negative sputum on admission	258	207
Number negative on admission, positive later	0	77
Number of readmissions during 1957	65	102
Number both admitted and readmitted during 1957	3	13
Number left against advice during 1957	7	54
Number of patient days 1957	77,676	96,144
Number of patient days in other provinces under reciprocal agreement		2,819
Number of patients in other provinces, January 1, 1957		8
Number of admissions in other provinces under reciprocal agreement		14
Total number of patient days including those in other provinces under reciprocal agreement		176,639
Number of institution patient days provided for non-residents in Alberta under reciprocal agreement		3,056
Number of patients in Alberta Sanatoria, non-residents under reciprocal agreement, January 1, 1957		9
Number of admission, non-residents, under reciprocal agreement		11

OPERATING ROOM REPORT

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Thoracoplasty—			
Number of stages	39	9	48
Number of 1st stages	23	9	32
Number of revisions	2	.....	2
Number of cases	29	9	38
Aspirations of chest	37	10	47
Bronchogram	15	33	48
Bronchoscopy	36	38	74
Cystoscopy and pyelogram	18	8	26
Casts	16	11	27
Implantation D.O.C.A.	8	8	16
Lobectomy and decortication .....	.....	3	3
Lobectomy	26	7	33
Lobectomy and thoracoplasty .....	.....	1	1
Lobectomy and wedge resection .....	.....	1	1
Nephrectomy	1	5	6
Pneumonectomy	3	3	6
Segmental resection	3	13	16
Thoracoplasty and lucite pack	4	.....	4
Orthopaedic operations	23	10	33
Miscellaneous examinations and procedures	338	31	369
TOTAL	621	209	830

SUMMARY PNEUMOTHORAX CASES

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Outside Points	Total
Under treatment beginning of year	3	7	.....	10
Number of new cases during year	1	2	.....	3
Number cases under treatment on admission .....	.....	.....	.....	.....
.....	4	9	.....	13
Number cases discontinued	2	4	.....	6
Number cases transferred out of Alberta .....	.....	1	.....	1
Number transferred to other sections of Division .....	.....	.....	.....	.....
.....	2	5	.....	7
Number under treatment end of year	2	4	.....	6
Unsuccessfully attempted .....	.....	.....	.....	.....
Refills:				
Resident	19	9	.....	28
Out-patient	10	102	.....	112
.....	29	111	.....	140

SUMMARY PNEUMOPERITONEUM CASES

Under treatment beginning of year	9	32	7	48
Number of new cases during year	5	6	.....	11
Number of cases under treatment on admission .....	.....	.....	1	1
.....	14	38	8	60
Number discontinued	11	25	7	43
Number transferred out of province .....	.....	.....	.....	.....
Number transferred to other sections of Division .....	.....	1	.....	1
.....	11	26	7	44
Number under treatment end of year	3	12	1	16
Number of refills:				
Resident	176	372	.....	548
Out-patient	90	339	67	496
.....	266	711	67	1,044

Patients are receiving pneumoperitoneum refills at the following outside points:

Beaverlodge	Lethbridge	St. Paul
Lamont	Vermilion	Westlock
Lac La Biche	Peace River	

NUMBER DISCHARGED ON DRUGS 1957

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Isoniazid and Para-amino Salicylic Acid	137	182	319
Isoniazid and Streptomycin	6	31	37
Streptomycin and Para-amino Salicylic Acid	5	2	7
Isoniazid, Streptomycin and Para-amino Salicylic Acid	8	14	22
Isoniazid	5	.....	5
TOTAL	161	229	390

DEPARTMENT OF PUBLIC HEALTH

LABORATORY REPORT

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
SPUTUM EXAMINATIONS:			
Positive	641	568	1,209
Negative	3,441	2,441	5,882
TOTAL	4,082	3,009	7,091
URINE EXAMINATIONS	9,030	7,855	16,885
BLOOD EXAMINATIONS:			
Blood Counts	4,930	4,429	9,359
Sedimentation Rates	3,042	2,815	5,857
Blood Sugars	177	874	1,051
TOTAL	8,149	8,118	16,267
MISCELLANEOUS:			
Pleural Fluid	6	46	52
Spinal Fluid	14	338	352
Gastric Analysis	8	14	22
Culture	1,890	1,506	3,396
Guinea Pig Inoculation	304	1,172	1,476
Other	2,539	919	3,458
TOTAL	4,761	3,995	8,756
WASSERMAN REPORT:			
Positive	6	4	10
Negative	321	316	637
TOTAL	327	320	647
Basal Metabolism Rate		33	33
Cardiograph		97	97

DENTAL REPORT

Number of patients (individuals)	364	566	930
Number of treatments	57	596	653
Number of prophylactic treatments	89	22	111
Number of fillings	146	259	405
Number of extractions	164	269	433
Number of new dentures and repairs	10	43	53

X-RAY DEPARTMENT REPORT

	Baker Memorial Sanatorium		Aberhart Memorial Sanatorium		Total	Total	Grand Total
	In Pts.	Out Pts.	In Pts.	Out Pts.	In Pts.	Out Pts.	
RADIOGRAPHS MADE:							
Chest—Full Size	1,659	1,174	1,831	529	3,490	1,703	5,193
Miniature	245	5,113		7,366	245	12,479	12,724
Ribs	1			1	1	1	2
Pelvis	25	16	34	46	59	62	121
Extremities	92	128	42	33	134	161	295
Spines—Cervical	8	2	6	5	14	7	21
Dorsal	61	80	39	28	100	108	208
Lumbar	71	8	31	27	102	35	137
Skull	8	3	2		10	3	13
Sinuses	5		7		12		12
F.P. Abdomen	8	3	13	1	21	4	25
G.B. Series			3		3		3
G.I. Series	6		1	1	7	1	8
Barium Enema			17		17		17
Intravenous Pyelogram ..	21		31	17	52	17	69
Retrograde Pyelogram ..	16		6		22		22
Sinogram			16	1	16	1	17
Bronchogram	14		36	3	50	3	53
Ordographs	85	4	90	16	175	20	195
Dental	58	2	104		162	2	164
K.U.B.	2	1			2	1	3
Mastoid	2				2		2
Sacro-iliac	9	11			9	11	20
Shoulder	7	10			7	10	17
Clavicle		3				3	3
Esophagus	1				1		1
Urogram				1		1	1
TOTAL	2,404	6,558	2,309	8,075	4,713	14,633	19,346
Fluoroscopic							
Examinations	281	121	1,357	3,996	1,638	4,117	5,755
Films received for							
Interpretation		10,415		15,495			25,910
Basal Metabolism Rate..		10					10
Cardiograph		19					19
Audiogram		7					7

CLASSIFICATION OF DISCHARGED PATIENTS

	On Admission	Residence		In.	On discharge		
		31 days or less	Over 31 days		AI.	AU.	D.
1. For diagnosis	125	79	46	5	9	....	5
2. Primary Tuberculosis	78	4	74	36	41	....	1
3. Reinfection type pulmonary tuberculosis clinical:							
Minimal	83	10	73	39	41	3	....
Moderately advanced	100	16	84	53	44	3	....
Far advanced	23	10	13	12	5	1	5
Miliary	1	....	1	1	....	....	....
4. Reinfection type pulmonary tuberculosis positive:							
Minimal	12	....	12	1	11	....	....
Moderately advanced	89	1	88	21	65	1	2
Far advanced	125	10	115	27	66	2	30
Miliary	6	2	4	3	1	....	2
5. Tuberculosis pleurisy	12	....	12	2	10	....	....
6. Non-pulmonary Tuberculosis:							
Abscess Plombage Space	1	....	1	1	....	....	....
Adenitis	26	2	24	4	22	....	....
Bone	17	1	16	9	8	....	....
Erythema Induration	1	....	1	....	....	....	....
Genito-urinary	25	4	21	11	13	....	1
Meningitis	8	2	6	6	....	....	2
Pelvic	23	4	19	9	14	....	....
Proctitis	1	....	1	1	....	....	....
Skin	4	1	3	2	2	....	....
Taenosynovitis	3	....	3	1	2	....	....
Uveitis	1	....	1	1	....	....	....
Total active tuberculosis	639	67	572	240	346	10	43
Total treated .....	....	....	618	193	349	3	28
Total untreated .....	....	146	....	52	6	7	20
Grand Total	764	....	....	245	355	10	48

EXPLANATION OF ABBREVIATIONS AND TERMS USED

The standard classification is that of the National Tuberculosis Association. Minimal, Moderately Advanced and Far Advanced refer to anatomical extent of disease.

In.	Inactive
AI.	Active improved
AU.	Active unimproved
D.	Died

N.B. Only those in residence over 31 days are classed as "treated".

N.B. 1 patient admitted as a tuberculosis case was found to be non-tuberculous which accounts for the apparent discrepancy in the above table.

CLASSIFICATION ON ADMISSION OF 764 DISCHARGED PATIENTS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
For diagnosis	79	46	125
Primary tuberculosis	34	44	78
Pulmonary tuberculosis	197	242	439
Tuberculous pleurisy	4	8	12
Non-pulmonary tuberculosis	41	69	110
TOTAL	355	409	764

CLASSIFICATION ON DISCHARGE OF TREATED CASES OF ACTIVE TUBERCULOSIS TUBERCULOUS PLEURISY

	On admission Number	On discharge		Died
		Improved	Unimproved	
Minimal	85	84	1	....
Moderately advanced	172	170	....	2
Far advanced	128	102	2	24
Primary	74	73	....	1
Miliary	5	5	....	....
Non-pulmonary tuberculosis	96	96	....	....
Tuberculous pleurisy	12	12	....	....
TOTAL	572	542	3	27

SUMMARY

Residence of Discharged Patients	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Cities	202	160	362
Towns	30	75	105
Counties	19	5	24
Villages	12	28	40
Enlarged Municipal Districts	40	36	76
Local Improvement Districts	44	85	129
Special Areas Board	2	....	2
Non-resident	6	20	26
TOTAL	355	409	764

DEPARTMENT OF PUBLIC HEALTH

SEX OF DISCHARGED PATIENTS	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Male	196	215	411
Female	159	194	353
TOTAL	355	409	764
AGE ON ADMISSION			
Under 1 year .....	.....	4	4
From 1 - 9	45	51	96
From 10 - 14	8	27	35
From 15 - 19	18	28	46
From 20 - 29	70	98	168
From 30 - 39	75	59	134
From 40 - 49	43	38	81
From 50 - 59	45	47	92
From 60 - 69	39	31	70
From 70 and over	12	26	38
TOTAL	355	409	764
SOCIAL STATUS OF DISCHARGED PATIENTS			
Single	140	184	324
Married	184	187	371
Divorced	7	1	8
Separated	13	8	21
Widowed	11	29	40
TOTAL	355	409	764
RESIDENCE IN ALBERTA			
Born in Alberta	131	220	351
1 year or less	60	15	75
1 - 5 years	37	32	69
6 - 9 years	20	26	46
10 - 14 years	20	14	34
15 - 19 years	10	7	17
20 - 29 years	23	38	61
30 or more years	54	57	111
TOTAL	355	409	764
LENGTH OF STAY IN SANATORIUM OF DISCHARGED PATIENTS			
DEATHS:			
Number in Sanatorium under 31 days.....	7	13	20
Number of patient days	57	155	212
Average Patient days	8.1	11.9	10.6
Number in Sanatorium 31 or more days.....	9	19	28
Number of patient days	14,037	12,537	26,574
Average Patient days	1,559.7	659.8	949.1
DISCHARGES:			
Number in Sanatorium under 31 days	95	31	126
Number of patient days	1,161	502	1,663
Average number patient days	12.2	16.2	13.2
Number in Sanatorium 31 days or more	244	346	590
Number of patient days	75,536	87,986	163,522
Average number of patient days	311.2	254.2	277.2
Total number deaths and discharges	355	409	764
Total number patient days	90,791	101,180	191,971
Average number patient days	254.2	247.4	251.1

DIVISION OF MENTAL HEALTH

R. R. MACLEAN, M.D., *Director*

Administration:

Progress has been made in developing and integrating the preventive and treatment services of the Mental Health Division. The Provincial Guidance Clinic Services have been expanded and the institutional treatment and rehabilitation services have been improved. Plans have been laid for further improvements in the immediate future.

The detailed reports of the services mentioned above follow:

PREVENTIVE SERVICES:

Provincial Guidance Clinics:

The full-time Clinics in Edmonton, Calgary and Lethbridge increased their work-loads during the year. The Red Deer and Ponoka Clinics, staffed by the Training School and the Provincial Mental Hospital, also increased their over-all work-loads. Favourable results were reported in all the Clinic treatment programs.

During the year, in addition to the work done in the actual Clinic Centres, 35 outside points were visited. The latter service was largely diagnostic, but included the making of recommendations in individual cases.

The Clinics dealt chiefly with children in the categories of the emotionally disturbed and otherwise maladjusted. There was some reduction in the percentage of the mentally retarded examined. The over-all number of emotionally disturbed children under treatment in the various Clinics at any particular time was approximately 30.

All Clinics participated in public education activities. Included in the latter were talks, panel discussions, lectures, workshops, institutes and radio and television appearances.

The Clinics assisted in the follow-up work with discharged Mental Hospital cases. There was close cooperation also with the Cerebral Palsy and other Health Clinics. Reports and recommendations were submitted to the appropriate authorities.

Separate reports of the various Clinics follow.

PROVINCIAL GUIDANCE CLINICS

Provincial Guidance Clinic, Edmonton

The year 1957 shows numerous staff changes with the loss of trained personnel, which caused a curtailment of the number of times points in the area were visited. Only one trip was made to the Peace River-Grande Prairie area.

New cases examined number 969, which is 77 less than were seen in 1956. Re-registered cases totalled 340, an increase of 55 over the previous year. The net decrease in the case load, in spite of the reduced number of trips by the Clinic to country points was 22. The total work load increased by 738 periods to an all time high of 8,024, indicating more intensive work being done in the training of staff and work with patients and their relatives. Most of the treatment cases continued to come from the area of Greater Edmonton.

Age and Sex Distribution—The ratio of male to female cases was 1.64:1. Of all new cases 92.66% were under the age of 20 years. Of these 36.9% were in the five to nine age group, while 26.11% were in the 10 to 14 age group.

Classification of Types of New Cases—There continued to be an increase in the number of severely disturbed children in the early age range of those seen in this Guidance Clinic. There was a decrease in the number of mentally defective children of all ages, from 26.9% to 21.05% of the total case load.

Educational Activity—This continued at a high level to community organizations, Nurses and Medical Students, amounting to a total of 89 periods. A drop of 68 periods in this field is accounted for by the increasing work in mental health education carried out by the Alberta Mental Health Association.

City of Edmonton—The total number of new cases examined amounted to 582, while 283 were re-registered during the year. The total work load was 6,800, an increase of 1,362 over the previous year, with an increase of 90 in the total case load for the City of Edmonton.

Edmonton Rural—In this area 70 new cases were seen and four were re-registered, amounting to a work load of 129.

Barrhead-Westlock—From this area 22 new cases and two re-registered cases were examined for a total work load of 64 periods, which represents a net decrease of 20 cases from 1956.

Lamont-Smoky Lake—New cases examined in this area amounted to 35, while no re-registered cases were seen, totalling a work load of 75 periods.

Camrose-Killam—In this area 37 new cases and two re-registered cases were seen for a work load of 76 periods. This is an increase of two cases.

Wainwright-Holden—No Clinics were held in Holden in 1957, although two new cases from this area were examined in the Edmonton Clinic. Wainwright had 16 new cases and 7 cases

were re-registered for a work load of 89, resulting in a net decrease of four cases.

Wetaskiwin—In this area 24 new cases and five re-registered cases were examined for a work load of 75 periods, this being a net decrease of 7 cases.

Athabasca-Lac La Biche—One Clinic was held in each point, at which 19 new cases and five re-registered cases were examined for a work load of 64, and a net decrease of five cases.

Bonnyville-St. Paul-Two Hills—Two Clinics were held in each point, at which 42 new cases and 13 re-registered cases were examined, for a work load of 169 and a net increase of six cases.

Vegreville-Vermilion—At Clinics held in these centres, 52 new cases and 3 re-registered cases were examined for a total work load of 164. This amounted to a net decrease of 30 cases.

Peace River-Grande Prairie—One trip of two weeks' duration was made into this area, during which time 68 new cases and 16 re-registered cases were examined for a work load of 319 and a net decrease of 76 cases.

PROVINCIAL GUIDANCE CLINIC, PONOKA

During 1957 Clinics in this area were attended, as is customary, by a Psychiatrist, a Psychologist and a Social Worker from the Provincial Mental Hospital staff. Clinics this year were held at Ponoka, Stettler, and Castor. Thirty-nine new and seven re-registered cases were seen, with a work load of 125. Some cases were seen at the request of private physicians, but the majority were referred through the Schools and Health Units.

PONOKA-RIMBEY

A Health Unit is now operative in the Town of Ponoka and this has taken over the work of organizing the Clinics. One formal Clinic was held in Ponoka during the past year and a number of other cases were seen at intervals upon request. There were no Clinics held in Rimbey, the cases from that district having been brought to Ponoka.

STETTTLER-CASTOR-CONSORT

Three Clinics were held at Stettler and Castor; no Clinics were requested for Consort. Thirteen new and seven re-registered cases were seen.

PROVINCIAL GUIDANCE CLINIC, RED DEER

The Provincial Guidance Clinic at Red Deer has again shown a yearly increase in its work load.

In addition to purely Psychotherapeutic interviews, Physical therapy was also carried out at the Municipal Hospital with the giving of Electro-Convulsant therapy on 24 occasions. Patients were also seen on a consultative basis by the Clinic Psychiatrist at the request of the family Physicians at the Municipal Hospital. During the year there were 117 new referrals seen and treated—an increase of 19 patients over the last year.

The number of interview hours was increased by 100, making a total of 659 interviews. Of the new cases, some 69 were children and 48 were adults.

Play therapy interviews were continued.

Interviews:

During the year the following numbers of Guidance Clinic interview hours were carried out:

Psychiatrist	375 hours
Psychologist	292 hours
Social Worker	24 hours
Medical Officer	2 hours

In addition to these interviews, 62 Psychometric examinations were done.

Extra Clinic Facilities

The Guidance Clinic Staff have continued their availability for public discussions and talks to such groups as Service Clubs, Home and School Associations and Women's groups. In this field, also, there was an increase from 12 talks being given the previous year to 18 being given this year.

PROVINCIAL GUIDANCE CLINIC, CALGARY

There have been no important changes in the operation of the Calgary Zone of the Provincial Guidance Clinics during the past year. The Clinic is still without the services of a full-time psychiatrist. Only one rural clinic was held, as clients from the area surrounding Calgary are usually able to attend the Clinic in Calgary with relatively little inconvenience to themselves. Psychologists from the Calgary Clinic spent a total of 41 days working in the Lethbridge Zone as the Lethbridge Clinic does not yet have the services of a full-time psychologist.

Two hundred sixty-seven new cases (151 male and 116 female) were examined, an increase of 17 from 1956. One hundred seventy-one cases were re-registered, 19 less than last year. The total work load was increased by 129 periods to a total of 3,120, this despite the fact that the Clinic was short-staffed for five months during the year. Eighty-one per cent of the new cases were under the age of 19. Medical practitioners, school authorities and Child Welfare agencies each referred approximately 13% of the new cases. Thirty-eight per cent were referred either by relatives or by the patients themselves. Psychotherapy was recommended for 58 cases. The number of mental defectives examined in 1957 was 63.

Calgary:

During the year 260 new cases were examined and 171 cases were re-registered. The work load was 3,101. The number of new cases and the total work load increased slightly during 1957.

Drumheller:

A two-day Clinic was held in Drumheller in February. Seven new cases were examined with a total work load of 19.

PROVINCIAL GUIDANCE CLINIC, LETHBRIDGE

During the greater part of the year the Clinic functioned with the full-time services of the psychiatrist and the receptionist, with part-time assistance from a psychologist from the Calgary Guidance Clinic and a summer relief worker. Some assistance was also received from the psychologist of the Attorney General's Department.

The Clinic moved into new and commodious offices in August which have facilitated the work greatly.

During the year 241 new cases were registered and 78 cases were re-registered.

City of Lethbridge:

Two hundred and six new cases were examined and 54 were re-registered. This was a substantial increase over the previous year's activities.

Medicine Hat:

Thirty-two new cases were registered and 24 were re-registered.

Other centres including Pincher Creek, Coleman, Raymond and Claresholm were visited by the Clinic. Three new cases were seen from the Crow's Nest Pass.

Provincial Gaol:

At the request of the Gaol Authorities 50 prisoners were examined and reports and advice submitted concerning these.

PROVINCIAL AUXILIARY MENTAL HOSPITAL, RAYMOND

The Clinic psychiatrist visited this hospital a number of times. All patients were examined and advice and suggestions for treatment were offered.

Public Education

Talks were given Service Clubs, Religious Groups, Home and School Associations. Members of the Clinic staff also participated in Radio, Television and Panel discussions. A number of lecture and demonstration courses were given also.

Court Services

The Clinic psychiatrist has rendered valuable service to the local courts, including the Children's Court. The local and Royal Canadian Mounted Police authorities were also given service and assistance.

TABLE 1
SUMMARY OF NEW AND RE-REGISTERED CASES EXAMINED, TREATMENT PERIODS, INTERVIEWS,
PSYCHOLOGICAL EXAMINATIONS, AND TOTAL WORK LOAD OF CLINICS

CLINIC DISTRICTS	NEW CASES			RE-REGISTERED CASES				DISTRIBUTION OF WORK				TOTAL WORK LOAD
	M	F	T	M	F	T		Pat.	Col.	Gen.	P.E.	
Edmonton and District	602	367	969	209	131	340		2,370	2,989	1,447	1,218	8,024
Calgary and District	151	116	267	90	81	171		1,010	1,419	403	288	3,120
Lethbridge and District	167	74	241	42	37	79		712	815	187	191	1,905
Ponoka and Red Deer District	79	77	156	24	22	46		574	283	21	86	964
TOTALS	999	634	1,633	365	271	636		4,666	5,506	2,058	1,783	14,013

Notes: Total new cases examined since the Clinics opened in 1929 is now 20,961.

Edmonton and District includes all the area served from Wetaskiwin north. It includes Clinics held in the Peace River-Grande Prairie area, and such points as Athabasca, Barrhead, Bonnyville, Horden, Lac La Biche, St. Paul, Two Hills, Vegreville, Vermilion, Wainwright, Westlock, and Wetaskiwin.

Calgary and District includes the area served south of Didsbury, excluding the Lethbridge area. It includes Clinics held at such points as Didsbury, Drumheller, Cochrane, High River and Strathmore.

Lethbridge and District includes the area in the far south of the province, with Clinics held at such points as Medicine Hat, Fort Macleod, Claresholm, Cardston and the Crow's Nest Pass.

Ponoka and Red Deer District includes the area from Didsbury on the south to Wetaskiwin on the north. It includes Clinics at such points as Castor, Ponoka, Red Deer, Rimbey, Rocky Mountain House and Stettler.

Re-registered cases are those that have been examined previously at a Clinic, and are seen again for further consultation and/or treatment.

Pat.—Patient contacts including treatment periods.

Col.—Collateral, or contacts with a patient's parents, or relatives, or with others closely interested.

Gen.—General contacts regarding Clinic activities and work, including those with other Agencies and Community Services. It includes as well talks and addresses, and teaching periods by staff members.

P.E.—Psychological examinations and tests.

Total Work Load—This is the sum of the periods of work noted under each of the four headings Patient, Collateral, General and Psychological examinations.

TABLE 2
AGE AND SEX CLASSIFICATION OF NEW CLINIC CASES

AGE GROUP	EDMONTON AND DISTRICT			CALGARY AND DISTRICT			LETHBRIDGE AND DISTRICT			PONOKA and RED DEER DISTRICT			TOTALS			PERCENTAGES		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 - 4	94	66	160	22	17	39	12	5	17	5	6	11	133	94	227	13.3	14.8	13.9
5 - 9	236	122	358	64	30	94	50	26	76	25	8	33	375	186	561	37.5	29.3	34.4
10 - 14	166	87	253	30	18	48	39	16	55	31	15	46	266	136	402	26.7	21.5	24.6
15 - 19	65	62	127	14	22	36	18	11	29	4	6	10	101	101	202	10.1	16.0	12.4
20 - 24	10	9	19	4	7	16	9	3	12	3	4	7	31	23	54	3.1	3.6	3.3
25 - 29	12	7	19	4	6	10	6	2	8	4	10	14	26	25	51	2.6	4.0	3.1
30 - 34	2	4	6	4	5	9	9	4	13	1	8	9	16	21	37	1.5	3.3	2.3
35 - 39	4	1	5	2	2	4	4	1	8	1	5	6	14	9	23	1.4	1.4	1.4
40 - 44	1	5	6	1	3	4	5	4	9	1	8	9	8	20	28	.9	3.2	1.7
45 - 49	3	1	4	0	3	3	3	1	4	1	4	5	7	9	16	.7	1.4	1.0
50 and over	8	2	10	1	2	3	8	0	4	2	3	5	19	7	26	1.9	1.0	1.5
Unknown	1	1	2	0	1	1	1	1	2	1	0	1	3	3	6	.3	.5	.4
TOTALS	602	367	969	151	116	267	167	74	241	79	77	156	999	634	1,633	100.0	100.0	100.0

TABLE 3A
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—PRE-SCHOOL GROUP (0 to 5 years 11 months)

Nature of Case	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Educational Problem with Adequate Intellect	19	8	27	6	1	7	0	0	0	1	0	0	26	9	35
Intellectual Inadequacy	54	34	88	16	6	22	9	5	14	4	3	2	83	48	131
Emotional Disorder	25	23	48	9	7	16	2	0	2	2	0	0	36	32	68
Thinking Disorder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Speech Disorder	21	5	26	3	1	4	1	0	1	2	0	0	27	6	33
Faulty Feeding Habits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sleep Disturbance	0	0	1	1	0	1	0	0	0	0	0	0	0	1	1
Anti-Social Trends	1	0	1	0	0	1	0	0	0	0	0	0	2	1	3
Sexual Difficulties	4	1	6	2	0	2	0	0	1	2	1	0	8	3	11
Attack Disorders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psychoneuroses	3	1	4	0	0	0	0	0	0	0	0	0	3	1	4
Psychoses	3	2	5	2	3	6	2	1	3	0	0	0	6	3	9
Non-Psychotic	9	4	13	3	3	6	2	1	3	0	0	0	14	8	22
Normal Child	0	2	2	0	1	1	5	2	7	0	0	0	5	5	10
Undiagnosed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	140	82	222	42	21	63	20	9	29	9	6	15	211	118	329

TABLE 3B
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—SCHOOL AGE GROUP (6 years to 18 years 11 months)

Nature of Case	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Educational Problem with Adequate Intellect	145	51	196	22	11	33	19	4	23	13	3	16	199	69	268
Intellectual Inadequacy	72	42	114	14	18	32	26	13	39	11	6	17	123	79	202
Emotional Disorder	97	92	189	19	13	32	17	11	28	10	7	17	143	123	266
Thinking Disorder	13	6	19	1	1	2	2	1	3	3	1	4	19	9	28
Speech Disorder	10	8	18	1	3	4	2	0	2	2	0	2	15	11	26
Faulty Feeding Habits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sleep Disturbances	2	0	2	0	0	0	0	0	0	0	0	0	2	0	2
Anti-Social Tendencies	46	28	74	12	8	20	6	2	8	5	2	7	69	40	109
Attack Difficulties	3	9	12	5	0	5	0	0	0	2	1	3	10	10	20
Attack Disorders	5	6	11	0	0	0	0	0	0	1	1	2	6	7	13
Psychoneuroses	2	3	5	2	3	5	1	2	3	2	1	3	7	9	16
Psychoses	5	1	6	0	0	0	0	1	1	0	0	0	5	2	7
Non-Psychotic	11	6	17	3	0	3	2	1	3	3	1	4	16	8	24
Normal Child	9	3	12	5	1	6	6	5	11	3	1	4	23	10	33
Undiagnosed	3	2	5	3	3	6	18	7	25	3	3	6	27	15	42
TOTALS	423	257	680	87	61	148	99	47	146	55	27	82	664	382	1,056

TABLE 3C
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—ADULT GROUP (19 years and over)

Nature of Case	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Educational Problem with Adequate Intellect	7	3	10	9	9	18	0	1	1	1	0	0	17	13	30
Intellectual Inadequacy	15	9	24	1	8	9	3	0	4	3	4	4	22	25	47
Emotional Disorder	1	1	2	0	1	1	0	0	0	0	3	3	1	5	6
Thinking Disorder	3	0	4	2	0	2	0	0	0	1	1	2	6	2	8
Speech Disorder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psychic Disorder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Badly Kept Habits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alcohol Disturbances	0	0	1	0	1	1	0	0	0	1	0	1	1	2	3
Sexual Difficulties	0	0	1	0	1	1	0	0	0	0	0	0	0	0	1
Attack Disorders	4	7	11	4	6	10	1	7	5	4	25	29	19	43	62
Psychoneurosis	4	4	8	1	4	5	19	2	21	3	5	8	27	15	42
Psychoses	1	2	3	2	2	4	12	2	14	1	3	4	16	9	25
Non-Psychotic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Normal	0	0	0	1	3	4	6	4	10	1	3	4	8	10	18
Undiagnosed															
TOTALS—Table 3C	39	28	67	22	34	56	48	18	66	15	44	59	124	124	248
Table 3B	423	257	680	87	61	148	49	40	89	53	27	82	664	392	1,056
Table 3A	140	82	222	42	21	63	20	9	29	6	6	15	211	118	329
GRAND TOTALS	602	367	969	151	116	267	167	74	241	79	77	156	999	634	1,633

TABLE 4
SOURCES REFERRING NEW CASES TO THE CLINICS

Referring Source	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Schools and School Authorities	239	98	337	20	15	35	53	16	69	31	7	38	343	136	479
Private Doctors and Medical Clinics	126	79	205	25	11	36	31	36	67	28	48	76	210	174	384
Medical Clinics, as Rehabilitation, Cerebral Palsy, T.B., etc.	33	24	57	10	10	20	5	3	8	0	0	0	48	37	85
Health Units, Medical Health Officers, Public Health Nurses	53	31	84	13	10	23	16	6	22	4	7	11	86	54	140
Child Welfare Agencies, Provincial and Municipal	61	54	115	17	18	35	6	3	9	1	0	1	85	75	160
Juvenile and Family Court, Juvenile Offenders Branch, Bowden Institution	11	13	24	0	4	4	3	0	3	1	0	1	15	17	32
Provincial Gaols, Adult Courts	3	0	3	0	0	0	39	1	40	2	0	2	44	1	45
Parents, Relatives, Friends and Self	68	63	131	57	44	101	10	5	15	11	12	23	146	124	270
Department of Public Health	4	0	4	1	3	4	0	2	2	0	0	0	5	5	10
Other Sources	4	5	9	8	1	9	4	2	6	1	3	4	17	11	28
TOTALS	602	367	969	151	116	267	167	74	241	79	77	156	999	634	1,633

NOTES: Provincial and Municipal Welfare Agencies will include Provincial and Civic Child Welfare or Children's Aid Departments, and Voluntary or Private Welfare Agencies, such as those supported by a Community Chest, Service Clubs, and protective Homes.

T.B.—Tuberculosis; O.P.D.—Outpatient Department of a Hospital.

M—Male F—Female T—Totals

TABLE 5
MAJOR RECOMMENDATIONS MADE IN REGARD TO NEW CLINIC CASES

Recommendations	Edmonton and District			Calgary and District			Lethbridge and District			Poroka and Red Deer District			Totals		
	M		T	M		T	M		T	M		T	M		T
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Admission to:															
(a) Mental Hospital	4	3	7	0	2	2	15	3	18	3	1	4	22	9	31
(b) Provincial Training School	36	25	61	12	10	22	18	12	30	4	3	7	70	50	120
Placement in:															
(a) Protective or Correctional Home or Institution	19	24	43	2	3	5	2	0	2	0	0	0	23	27	50
(b) Foster Home	8	3	11	3	3	6	0	2	2	0	0	0	11	8	19
Educational Advice:															
(a) Modified School Program or Special Class Placement	108	51	159	2	2	4	28	12	40	5	4	9	143	69	212
(b) Vocational Counseling	26	32	58	13	8	21	1	0	1	3	1	4	43	41	84
(c) Other	95	22	117	9	6	15	2	0	2	5	0	5	111	28	139
Modified Home Management	109	66	175	65	33	98	31	12	43	13	9	26	222	120	342
Referred for Medical Treatment	47	30	77	2	8	10	16	6	22	3	3	6	68	47	115
Treatment in Guidance Clinic	127	88	215	31	27	58	9	7	16	32	43	75	199	165	364
Other Recommendations	23	23	46	12	14	26	45	20	65	7	13	20	87	70	157
TOTALS	602	367	969	151	116	267	167	74	241	79	77	156	989	634	1,633

M—Male F—Female T—Totals

TABLE 6
SUMMARY OF THE NUMBER OF MENTAL DEFECTIVES EXAMINED, BY YEARS

Year	I. Q. 0 to 25 Probably Idiots			I. Q. 26 to 50 Probably Imbeciles			I. Q. 51 to 75 Probably Morons			I. Q. Unknown, Mental Deficiency Indicated			Totals			Percentage Of New Cases	Cumulative Totals
	I. Q. 0 to 25 Probably Idiots			I. Q. 26 to 50 Probably Imbeciles			I. Q. 51 to 75 Probably Morons			I. Q. Unknown, Mental Deficiency Indicated			Totals				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
	Number of Mental Defectives Examined to 1946																
1946	2	2	4	16	13	29	40	43	83	9	9	18	67	67	134	40.6%	2,001
1947	3	1	4	28	14	42	77	48	125	19	14	33	127	127	254	41.9%	2,255
1948	6	8	14	34	33	67	86	47	133	24	12	36	150	150	404	21.9%	2,455
1949	3	4	7	27	29	56	54	63	117	9	7	16	93	103	196	13.2%	2,651
1950	13	20	33	44	40	84	148	80	228	2	0	2	207	140	347	21.4%	2,998
1951	7	13	20	33	35	68	85	70	155	3	6	9	128	124	252	20.0%	3,250
1952	7	4	11	36	31	67	114	94	208	4	2	6	161	131	292	22.7%	3,542
1953	6	4	10	30	39	69	102	68	170	19	7	26	157	171	328	22.2%	3,817
1954	3	4	7	42	43	85	125	93	218	13	12	25	183	196	379	23.6%	4,152
1955	5	3	8	54	40	94	125	93	218	30	17	47	216	155	371	23.6%	4,523
1956	7	5	12	65	46	111	126	88	214	27	21	48	245	160	405	25.0%	4,928
1957	11	13	24	40	32	72	115	86	201	18	23	41	184	154	338	20.7%	5,266
																	1867

Notes: I. Q.—Intelligence Quotient

M—Male F—Female T—Totals

ACTIVE TREATMENT MENTAL HOSPITALS

The Provincial Mental Hospital, PONOKA

The Provincial Mental Institute, EDMONTON

The Provincial Mental Hospital, PONOKA, and The Provincial Mental Institute, EDMONTON, have completed the first full year during which the former received patients from the Southern half of the Province only, and the latter received patients from the Northern half only. There were very few exceptions to this arrangement.

The Provincial Mental Hospital admitted 692 (including re-admissions). The Provincial Mental Institute admitted 836 (including re-admissions). The Provincial Mental Institute admitted 140 remand cases during the year, whereas the Provincial Mental Hospital admitted only 10 remand cases. It is interesting to note that the overall difference (144) in the number of admissions to the Provincial Mental Hospital and the Provincial Mental Institute is approximately the difference between the number of remand cases admitted to the two institutions. The trend of the Provincial Mental Institute to admit more cases has continued in 1957 and appears to be related to this fact that this hospital admits many more remand cases.

The discharge rates of the two institutions are almost identical and is approximately 82% of the admission rate.

Both active treatment hospitals report very beneficial results from the use of tranquilizing drugs, as evidenced by decreased need for seclusion, and marked improvement in the behaviour of the patients on all wards—especially the continued treatment wards. Credit for improved results in treatment is also given such therapies as group, occupational and recreational.

The overall populations of the active treatment mental hospitals have not increased but accommodation has been improved, which is considered a factor also in the success of the treatment program, and the improved behaviour patterns of the patients.

The Medical Superintendents report that it is not apparent in the admission rates of the Provincial Mental Hospital or the Provincial Mental Institute, that these have been affected by the functioning of the Psychiatric Wards in the University of Alberta Hospital, or the Calgary General Hospital.

In both active treatment hospitals the "open-door" policy has been pursued and several open wards have been added to those already in existence.

The Nursing Staff Training Programs have continued. Both active treatment hospitals are instructing affiliate students from the General Hospitals throughout the Province.

Separate reports of the Active Treatment Hospitals follow :

TABLE 1
TABULATED SUMMARY—INSTITUTIONS—MOVEMENT OF POPULATION

Institutions	Patients in Hospital December 31st, 1956			Admissions (Excluding Transfers)			Discharges			Deaths			Patients in Hospital December 31st, 1957		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
ACUTE MENTAL HOSPITALS															
	923	598	1521	354	338	692	287	283	570	36	32	68	921	602	1523
	1022	490	1512	497	333	830	404	284	688	66	19	85	1036	507	1543
	P.M.I., Edmonton														
†Total	1945	1088	3033	851	671	1522	691	567	1258	102	51	153	1957	1109	3066
CHRONIC MENTAL HOSPITALS															
	285	220	505	*60	35	95	3	1	4	56	35	91	284	217	501
	0	96	96	0	1	1	0	0	0	0	2	2	0	96	96
	0	134	134	0	4	4	0	2	2	0	3	3	0	133	133
P.A.M.H., Raymond															
Total	285	450	735	60	40	100	3	3	6	56	40	96	284	446	730
MENTAL DEFECTIVE SCHOOL															
	392	306	698	39	31	70	34	19	53	1	5	6	395	312	707
Overall Total	2622	1844	4466	950	742	1692	728	589	1317	159	96	255	2636	1867	4503

PLEASE NOTE—†These totals include some 500 mental defectives, seniles and non-psychotics who do not require active treatment.

*All admissions by transfer from other Alberta Mental Hospitals.

TABLE 2.
FIRST ADMISSIONS

DIAGNOSTIC CLASSIFICATION:	Male	Female	Total
Syphilis with Psychosis	3	1	4
Schizophrenia	116	97	213
Manic Depressive	25	25	50
Involuntary Psychoses	15	19	34
Paranoid Conditions	17	14	31
Senium	52	44	96
Pre-Senile	3	2	5
Psychosis with Cerebral Arteriosclerosis	54	30	84
Alcoholic Psychosis	23	6	29
Psychoses with Other Demonstrable Etiology	23	12	35
Other and Unspecified Psychoses	11	5	16
Anxiety Reaction	9	17	26
Hysterical Reaction	5	8	13
Obsessive Compulsive	3	0	3
Neurotic Depressive	19	30	49
Other Psychoneurotic Conditions	8	8	16
Pathological Personality	68	21	89
Immature Personality	4	7	11
Alcoholism	61	7	68
Drug Addiction	1	1	2
Mental Deficiency	14	22	36
Epilepsy	6	5	11
Primary Behaviour Disorders	8	5	13
Other and Unspecified Disorders of Character, Behaviour and Intelligence	0	1	1
Mental Observation Without Need for Psychiatric Care	18	7	25
Other Non-Psychiatric Conditions	2	0	2
TOTALS	568	394	962

TABLE 3 — TABULATED SUMMARY OF DEATHS IN INSTITUTIONS DURING 1957

DISEASE	P.M.H. Ponoka			P.M.I. Edmonton			P.T.S. Red Deer			Rosehaven			Clarkeholm			Raymond			TOTALS		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1. Tuberculosis of Respiratory System	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
17. All Other Diseases Classified as Infective and Parasitic	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
18. Neoplasms Malignant	4	2	6	0	1	1	0	0	0	0	2	4	0	0	0	0	0	0	6	5	11
19. Benign and Unspecified Neoplasms	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. Diabetes Mellitus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21. Vascular Diseases of Central Nervous System	4	2	6	10	2	12	0	0	0	11	4	15	0	1	1	0	0	0	25	9	34
22. Chronic Rheumatic Heart Disease	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
25. Arteriosclerotic and Degenerative Heart Disease	7	6	13	29	10	39	0	0	0	8	6	14	0	0	0	0	0	0	44	22	66
26. Other Diseases of the Heart	4	4	8	0	0	0	0	2	2	5	1	6	0	0	0	1	1	1	9	8	17
27. Hypertension with Heart Disease	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
30. Influenza	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4
31. Pneumonia	12	9	21	16	0	16	1	3	4	29	22	51	0	1	1	0	1	1	58	36	94
38. Nephritis and Hephirosis	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
43. Senility	3	3	6	7	2	9	0	0	0	1	0	1	0	0	0	0	0	0	3	3	6
46. All Other Diseases	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	12
49. Suicides and Self-inflicted Injury	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
TOTALS	36	32	68	66	19	85	1	5	6	56	35	91	0	2	2	0	3	3	159	96	255

PROVINCIAL MENTAL HOSPITAL, PONOKA

T. C. MICHIE, M.D., *Medical Superintendent*

Patient Population Changes

The resident population on January 1st, 1957 was 1,521 of whom 923 were male, and 598 female. The number in residence on December 31st, 1957 was 1,523, of whom 921 were male, and 602 female. This was an overall increase of two. The details are set out in Table I.

Admission of Patients

Exclusive of transfers from other Provincial Mental Institutions, 692 patients were admitted. This was an increase of 41 over the number admitted in the previous year. 354 of those admitted were male, and 338 female.

Admissions by Voluntary Application numbered 210, by Medical Certificates 161, by Warrant 318, and 3 were admitted under "The Mental Defectives Act."

Forty patients were admitted as transfers from other Provincial Mental Institutions. The only significant change in the mode of admissions was a slight decrease in certified cases, and an increase in voluntary admissions, this having risen to thirty per cent. There was essentially no difference in the proportions of the various diagnostic categories. Syphilis has almost vanished as a causative factor in mental illness. Among first admissions, there was only one case of psychosis with syphilis.

Separation of Patients

570 patients were discharged, of whom 287 were men and 283 women. This was an increase of 52, as compared with 1956. The percentage discharged during the year, as compared with admissions, was also higher than in 1956, the actual figure being slightly in excess of eighty-two per cent. Ninety-one patients were transferred to other Mental Institutions, and 68 patients died, this being a decrease of four, as compared with the previous year. These were almost all in the aged group. 388 patients were given leave to be away from the Hospital, under the care of relatives, for periods of more than twenty-four hours.

Accidents and Elopements

Twenty-three patients suffered from fractures, six being men, and seventeen women. Most of these were among the aged.

There were no suicidal deaths.

A comparatively small number of patients left the Hospital without permission. In nearly all instances, they were returned by relatives or the police.

General Health of Patients

There were no epidemics. The general health of patients was maintained at a good standard.

Three patients, one man, and two women, were transferred to the Tuberculosis Unit at the Provincial Mental Institute, Edmonton, during the year.

Clinical Work

During the past year, there was a marked increase in the use of the new tranquilizing drugs, with beneficial results. There was a decreased need for seclusion, and a marked improvement in the behaviour of patients on the continued treatment wards. Many more patients became accessible to group therapy, either recreational, or in a form specifically directed toward rehabilitation. Patients previously confined to wards, had access to Hospital therapeutic facilities, and in some instances, it was possible to discharge long-term patients. There was a further decrease in the use of electroshock therapy. Insulin-shock therapy continued to be favoured for certain patients. The aim throughout the year was to extend, as far as possible, the "Open-Door" policy, always keeping in mind the safety of patients and the responsibility of the Hospital to the public.

Occupational Therapy

There was continued emphasis on this form of treatment. During the year, approximately 450 patients attended classes in the main studios. Classes were also conducted at various other points in the Hospital, the general over-all direction coming from the Occupational Therapy Staff.

The Library continued to give good service to the patients.

The Canteen was operated successfully with patient help, the proceeds being mostly used to purchase articles and equipment for the benefit of patients. On occasions, money was expended for individual patients, considered to be in need.

Recreational Therapy

The facilities of this department were taxed to the limit, because of the increasing number of patients who became accessible, in a greater degree, to this form of treatment. To meet the patients' needs, it was considered desirable to construct an extension to the main recreation hall. This was not completed at the end of the year. It was found the patients tended to spontaneously develop from within their own numbers, organized recreational activities. During the year, the majority of patients had access to television programs. It was felt this was beneficial, and greatly appreciated by the patients.

Religious Services

There was no change in the religious services from the previous years. The Visiting Clergy showed a great interest in the welfare of the patients. Many patients were privileged to attend religious services in the Town of Ponoka.

Social Services—Social Worker

During 1957, the position of Social Worker was held by a male Psychiatric Nurse, with a special aptitude for this work. While at the Hospital, he assisted with group therapy, and concerned himself with problems of individual patients referred to him. During the year, he travelled over 10,000 miles, and made in excess of 300 calls. For the most part, these were related to after-care, but on a good many occasions, he interviewed prospective patients and their relatives. Whenever possible, the relatives of patients visiting the Hospital were interviewed by the Worker.

Social Services—Psychologist

The Psychologist resigned in September, 1957, to continue her education at the University of Alberta. She gave very good service to the Hospital. Her duties consisted of carrying out required psychometric examinations, and administering projective tests, when indicated. She also assisted with group therapy.

There was no applicant for the position for the remainder of the year. However, some of the psychological examinations were done by a Physician, who had previous training in this field.

Dental Services

This department continued to provide efficient service to the patients. The Dentist also supplied services for the patients in the Provincial Auxiliary Hospitals at Claresholm and Raymond.

X-Ray Services

This department operated with efficiency under the direction of a Nurse-Technician, although with some difficulty, because of the volume of work. In all, over 4,000 examinations were made. All chest plates were referred to the Medical Staff of the Baker Memorial Sanatorium, Calgary, for interpretation. On occasions, plates were sent to Specialists in Calgary or Edmonton; otherwise the X-rays were read by the Medical Staff of this Hospital.

Laboratory Services

In general, the Laboratory provided adequate facilities for diagnostic work. On occasions, blood and spinal fluid specimens, as well as all tissues from the operating room, were referred to the Provincial Laboratory, Edmonton. On a very few occasions, specimens were sent to the Bio-Chemistry Department of the University of Alberta.

School of Nursing

The Teaching program was essentially unchanged, although methods were modified or amplified in keeping with current Teaching trends. The Instructor for Affiliates resigned on July 13th, 1957, and was replaced temporarily by a Nurse, without

formal training in Teaching, but with a special aptitude in this field. On August 28th, 1957, a male Clinical Instructor was appointed, and assigned to duties on the male wards. He received his basic training in General and Psychiatric Nursing in Holland, and subsequently completed the Course in Supervision and Psychiatric Nursing at the University of Toronto. His services did much to improve the nursing level on the male wards. An Instructor who had been on leave of absence attending McGill University returned to the Staff on October 12th, 1957, and assumed the position of Clinical Instructor of Women's Wards. There were four Instructors in the School of Nursing during most of the year, three of whom held special qualifications.

Twenty-one students received instruction in the four-year course in General and Psychiatric Nursing. Ten received Certificates on completion of this course in June.

Twenty-two men received instruction in the three-year course in Psychiatric Nursing. Eight men received Diplomas in June.

One hundred and twenty-five affiliating Student Nurses from: The Archer Memorial Hospital, LAMONT; CALGARY General Hospital; Holy Cross Hospital, CALGARY; MEDICINE HAT General Hospital; LETHBRIDGE Municipal Hospital; St. Joseph's General Hospital, VEGREVILLE; and St. Michael's Hospital, LETHBRIDGE, received eight weeks' instruction in Psychiatric Nursing at this Hospital during the year. In addition, five Graduate Nurses were in attendance for eight weeks for deferred affiliation in Psychiatric Nursing.

Nineteen Graduate Nurses completed the Course in Psychiatric Nursing and received Diplomas.

Eleven Public Health Student Nurses from the University of Alberta were in attendance at this Hospital for field work, for a period of two weeks.

The Certified Nursing Aides who joined the Staff were given a short course in Psychiatric Nursing. This was repeated as frequently as necessary.

Ward Aides appointed to the Staff likewise were given short Orientation Courses by the School of Nursing.

Visitors

There has been a steady increase in the number of visits made by relatives to patients. As in previous years, every encouragement was given for such visits. Visiting was permitted morning and afternoon seven days a week.

The Hospital was inspected on a number of occasions during the year by the Hon. Dr. W. W. Cross, Minister of Health, and also by Dr. A. Somerville, Deputy Minister of Health. It was with regret the Hospital Staff received the news of Dr. Cross' resignation as Minister of Health, during the year, this being the termination of a long period of active association of the Minister with this Hospital. His successor, Dr. J. Donovan Ross visited the Hospital several times after assuming his new duties, and made an extensive survey of the Hospital facilities.

Dr. Randall R. MacLean, Director of The Division of Mental Health, frequently inspected the Hospital during the year.

The Visiting Board made its annual survey of the Hospital, as in previous years, with particular reference to the needs of patients.

In June, the Hospital was visited by Dr. Barnett, Professor of Administrative Medicine of Columbia University, New York. Dr. Barnett's immediate interest was in relation to the program of study in Administrative Medicine at Columbia University, undertaken by the Assistant Medical Superintendent.

Various organizations in the community took an active interest in the patients' welfare, made visits to the Hospital, assisted in recreational activities and in other efforts to promote the welfare of patients.

The Eugenics Board

Five meetings were held at this Hospital by The Eugenics Board during the year. Twenty-three male and thirty-five female patients, making a total of fifty-eight, were presented to the Board. Forty-nine male and twenty-nine female patients, or a total of seventy-eight were sexually sterilized during the year, at this Hospital.

Surgical Services

Surgical services were rendered by the two regularly appointed Consultants from Calgary and Edmonton. There were occasions when Surgeons from the Town of Ponoka, or Specialists in the various fields, from Calgary, Edmonton and Red Deer were called.

Housekeeping Department

There was no change in the program. Efforts were continued to improve the appearance of the wards, and to promote the comfort and privacy of patients.

Maintenance Department

Buildings were, in general, kept in good repair. The roofs of three buildings were replaced. The tile floor was replaced in one of the male dining rooms. During the year, an extensive program of re-painting the exterior of buildings was commenced. The work on one male building, and one female building was completed.

Fire Protection

There was no change in the policy of fire protection. During the year, the new fire alarm system went into operation, and functioned satisfactorily. The fire engine was replaced by a new, triple combination pumper, which is considered to be a highly efficient, fire fighting machine. The Fire Brigade was fully manned, and there was a continuing program of instruction for the fire fighters.

On January 31st, 1957, one of the poultry buildings caught fire, and was partially destroyed. The main section was saved.

New Buildings and Equipment

The machinery was installed in the new cannery, and it gave good service during the canning season.

The incinerator was completed late in the year, and seemed to function efficiently.

The re-wiring project of the Hospital was completed. All electrical current at the Hospital is now alternating in type.

A cement sidewalk was laid from the main buildings to the Occupational Therapy Building, and also an approach sidewalk to the male admitting unit.

The construction was commenced, but not completed of an addition to the main recreation hall, and a new residence for Medical Staff.

Business Office

This department functioned with efficiency during the year. The Business Manager supervised the operation of the Farm, and the various Ancillary services of the Hospital.

Provincial Mental Hospital Farm

In general, there was a good production of vegetables and grain. There was an adequate supply of pork and poultry products for the needs of the Hospital, but the milk supply continued to be insufficient.

Ancillary Services

In general, the Hospital departments, including the Laundry, Linen Room, Print Shop, Sewing Room, Shoe Shop and Tailor Shop provided satisfactory services.

The Department of Public Works

This Department, under the direction of the Chief Engineer, functioned with efficiency. There was at all times, an adequate supply of heat, light and water.

Conclusion

During the past year, the policies of administration were not changed. This, however, was the first year the newer tranquilizing drugs were used extensively. Throughout much of the year, approximately thirty per cent of the patient population received these drugs. In combination with other forms of therapy, the results were in general highly beneficial. The need for electroshock therapy was decreased, but that for occupational and recreational and other forms of group therapy increased. It was possible to accord a much greater degree of freedom to patients, and in general, there was a very decided improvement in the social atmosphere of wards. There seems little doubt that these drugs have given new hope in the treatment of mental illness, in many of its forms.

1957 was the first full year in which this Hospital served only the southern half of the province. The admission rate, however showed some indication of increasing. This might be interpreted as indicating an increase in the incidence of mental disorder. A more realistic interpretation could be this trend is due to an increasing population of the province, and greater utilization of Mental Hospital services by those needing help. It can be said with some degree of satisfaction, that 1957 was a year in which progress was made in the treatment and care of patients, and in which hope ran high for the future.

Deep appreciation is expressed to the senior officers of The Department of Public Health for the sympathetic understanding, the encouragement and helpful advice given to the Staff of the Hospital in its efforts to assist those entrusted to its care.

TABLE 1
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
MOVEMENT OF THE PATIENT POPULATION DURING THE YEAR 1957

	M	F	T					
In residence as of December 31st, 1956	923	598	1521					
On Leave or otherwise absent	17	34	51					
On the books as of December 31st, 1956	940	632	1572					
ADMISSIONS:								
First Admissions:	M	F	T	M	F	T		
Voluntary	47	62	109	.....	.....	.....	.....	.....
Medical Certificate	45	60	105	.....	.....	.....	.....	.....
Warrant	143	69	212	.....	.....	.....	.....	.....
M.D. Act	1	1	2	.....	.....	.....	.....	.....
	.....	.....	.....	236	192	428	.....	.....
RE-ADMISSIONS:								
Voluntary	40	61	101	.....	.....	.....	.....	.....
Medical Certificate	13	43	56	.....	.....	.....	.....	.....
Warrant	65	41	106	.....	.....	.....	.....	.....
M.D. Act .....	.....	1	1	.....	.....	.....	.....	.....
	.....	.....	.....	118	146	264	.....	.....
Transfers in .....	.....	.....	.....	26	14	40	.....	.....
	.....	.....	.....	.....	.....	.....	380	352
							732	
							1320	984
							2304	
SEPARATIONS:								
Discharges:								
As recovered	91	95	186	.....	.....	.....	.....	.....
As improved	110	137	247	.....	.....	.....	.....	.....
As unchanged	24	7	31	.....	.....	.....	.....	.....
As not psychotic	62	44	106	.....	.....	.....	.....	.....
	.....	.....	.....	287	283	570	.....	.....
Deaths .....	.....	.....	.....	36	32	68	.....	.....
Transfers out .....	.....	.....	.....	58	33	91	.....	.....
	.....	.....	.....	.....	.....	.....	381	348
							729	
On books as of December 31st, 1957	939	636	1575					
On Leave or otherwise absent	18	34	52					
In residence as of December 31st, 1957	921	602	1523					

N.B. "First Admissions" in this table refer to First Admissions to this hospital, subsequent tables refer to First admissions to any hospital in Canada.

TABLE 2

PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA

RESIDENT PATIENT POPULATION BY PSYCHOSES—December 31st, 1957

	Male	Female	Total
Syphilis with Psychosis	51	9	60
Schizophrenia	475	307	782
Manic Depressive Psychoses	42	62	104
Involuntional Psychoses	4	18	22
Paranoid Conditions	66	43	109
Senium	13	17	30
Pre-senile Psychoses	3	5	8
Psychosis with Cerebral Arteriosclerosis	17	23	40
Alcoholic Psychoses	19	7	26
Psychoses with other demonstrable etiology	44	22	66
Other and Unspecified Psychoses	71	40	111
Hysterical Reaction	1	1	2
Obsessive Compulsive Reaction	2	1	3
Neurotic Depressive	2	5	7
Other Psychoneurotic Conditions	1	3	4
Pathological Personality	11	1	12
Alcoholism	11	1	12
Mental Deficiency	83	36	119
Epilepsy	2	2	4
For mental observation without need for Psychiatric care	2	2	4
Other non-psychiatric conditions	3	3	6
TOTALS	921	602	1523

TABLE 3

PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA

FIRST ADMISSIONS DURING 1957 BY PSYCHOSES

CLASSIFICATION:	Male	Female	Total
Syphilis with Psychosis	1	...	1
Schizophrenia	46	30	76
Manic Depressive	15	15	30
Involuntional Psychoses	6	5	11
Paranoid Conditions	11	10	21
Senium	25	24	49
Pre-senile	1	...	1
Psychosis with Cerebral Arteriosclerosis	17	17	34
Alcoholic Psychosis	14	5	19
Psychoses with other demonstrable etiology	7	7	14
Other, and Unspecified Psychoses	8	3	11
Anxiety reaction	4	10	14
Hysterical reaction	3	3	6
Obsessive Compulsive	3	...	3
Neurotic Depressive	6	18	24
Other Psychoneurotic Conditions .....	...	3	3
Pathological Reaction	7	4	11
Alcoholism	27	2	29
Mental Deficiency	4	15	19
Epilepsy	2	4	6
Primary Behavior disorders	2	2	4
Other and Unspecified disorders of character, behavior and intelligence .....	...	1	1
Mental observation without need for Psychiatric care	8	2	10
Other non-Psychiatric conditions	2	...	2
TOTALS	219	180	399

DEPARTMENT OF PUBLIC HEALTH

TABLE 4
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
RACIAL ORIGIN OF FIRST ADMISSIONS DURING 1957

Origin	Male	Female	Total
Austrian .....	.....	2	2
Chinese	4	.....	4
Czech and Slovak	1	4	5
Danish	4	3	7
Dutch	6	5	11
English	56	53	109
Finnish	2	.....	2
French	8	5	13
German	20	16	36
Hungarian	5	2	7
Italian	2	1	3
Native Indian or "Breed"	1	4	5
Irish	26	19	45
Japanese	1	2	3
Jewish .....	.....	3	3
Norwegian	10	5	15
Polish	3	3	6
Russian	8	4	12
Scottish	31	20	51
Swedish	7	7	14
Swiss	2	.....	2
Ukrainian	4	8	12
Welsh	3	3	6
Yugoslavian	2	1	3
Not known .....	.....	.....	.....
Canadian born	7	4	11
American born	2	4	6
All others	4	2	6
TOTALS	219	180	399

TABLE 5
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
AGE OF FIRST ADMISSIONS DURING 1957

Age	Male	Female	Total
Under 15 years	1	5	6
15 to 19 years	14	18	32
20 to 24 years	18	14	32
25 to 29 years	31	8	39
30 to 34 years	18	19	37
35 to 39 years	19	14	33
40 to 44 years	16	13	29
45 to 49 years	21	17	38
50 to 54 years	13	14	27
55 to 59 years	11	6	17
60 to 64 years	8	9	17
65 to 69 years	9	11	20
70 to 79 years	26	20	46
80 and over	14	12	26
TOTALS	219	180	399

TABLE 6
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
DISCHARGES BY PSYCHOSIS AND CONDITION ON DISCHARGE

CLASSIFICATION	Recovered		Improved		Un- changed		Not Psy.		Totals			
	M	F	M	F	M	F	M	F	M	F	T	T
Syphilis with Psychosis .....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	1
Schizophrenia	37	34	55	61	14	.....	.....	.....	106	95	201	201
Manic Depressive	22	28	13	11	.....	1	.....	.....	35	40	75	75
Involuntal	5	9	3	8	.....	.....	.....	.....	8	17	25	25
Paranoid Conditions	1	.....	11	14	5	.....	.....	.....	17	14	31	31
Senium .....	.....	.....	1	3	1	2	.....	.....	2	5	7	7
With Cerebral Arteriosclerosis	1	1	2	2	.....	.....	.....	.....	3	3	6	6
Alcoholic Psychosis	17	3	2	1	.....	.....	.....	.....	19	4	23	23
Of other demonstrable etiology	2	5	7	.....	1	1	.....	.....	10	6	16	16
Other and unspecified Psychoses	2	2	2	2	2	.....	.....	.....	6	4	10	10
Anxiety reaction	1	2	4	13	.....	1	.....	.....	5	16	21	21
Hysterical reaction .....	.....	2	3	3	.....	.....	.....	.....	3	5	8	8
Obsessive Compulsive .....	.....	.....	2	1	1	.....	.....	.....	3	1	4	4
Neurotic Depressive	3	7	4	13	.....	1	.....	.....	7	21	28	28
Other Psychoneurotic reactions .....	.....	2	.....	5	.....	1	.....	.....	3	5	8	8
Pathological reactions .....	.....	.....	.....	.....	.....	.....	11	8	11	8	19	19
Alcoholism .....	.....	.....	.....	.....	.....	.....	30	3	30	3	33	33
Mental Deficiency .....	.....	.....	.....	.....	.....	.....	3	20	3	20	23	23
Epilepsy .....	.....	.....	.....	.....	.....	.....	1	3	1	3	4	4
Primary Behaviour disorders .....	.....	.....	.....	.....	.....	.....	3	1	3	1	4	4
Other and Unspecified disorders of character, behaviour and intelligence .....	.....	.....	.....	.....	.....	.....	2	3	2	3	5	5
Mental observation without need for Psychiatric care .....	.....	.....	.....	.....	.....	.....	6	3	6	3	9	9
Other non-psychiatric conditions .....	.....	.....	.....	.....	.....	.....	6	3	6	3	9	9
TOTALS	91	95	110	137	24	7	62	44	287	283	570	570

TABLE 7
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
DISCHARGES BY PSYCHOSIS AND DURATION OF RESIDENCE

CLASSIFICATION	Under 3 months		Under 6 months		Under 1 year		Over 1 year		Totals		
	M	F	M	F	M	F	M	F	M	F	T
Syphilis with Psychosis .....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1
Schizophrenia	41	37	26	28	23	12	16	18	106	95	201
Manic Depressive	26	28	7	6	1	5	1	1	35	40	75
Involuntal	6	11	2	5	.....	.....	.....	1	8	17	25
Paranoid Conditions	5	5	6	5	1	1	5	3	17	14	31
Senium	1	5	1	.....	.....	.....	.....	.....	2	5	7
With Cerebral Arteriosclerosis	3	1	.....	1	.....	1	.....	.....	3	3	6
Alcoholic Psychosis	16	4	2	.....	.....	.....	1	.....	19	4	23
Of other demonstrable etiology	3	6	2	.....	4	.....	1	.....	10	■	16
Other and Unspecified Psychoses	4	1	.....	2	.....	1	2	.....	6	4	10
All Psychoneurotic reactions	17	40	1	5	.....	6	.....	.....	18	51	69
Pathological reactions	7	6	3	2	.....	.....	1	.....	11	8	19
Alcoholism	25	3	2	.....	3	.....	.....	.....	30	3	33
Mental Deficiency .....	.....	18	2	1	1	.....	.....	1	3	20	23
Epilepsy	1	1	.....	2	.....	.....	.....	.....	1	3	4
Primary behaviour disorders	2	.....	.....	1	1	.....	.....	.....	3	1	4
Other and Unspecified disorders of character, behaviour and intelligence	2	1	.....	2	.....	.....	.....	.....	2	3	5
Mental observation without need for psychiatric care	6	2	.....	1	.....	.....	.....	.....	6	3	9
Other non-psychiatric conditions	6	2	.....	1	.....	.....	.....	.....	6	3	■
TOTALS	171	171	54	62	34	26	28	24	287	283	570

TABLE 8
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
CAUSES OF DEATH DURING 1957
ABRIDGED INTERNATIONAL CLASSIFICATION

CLASSIFICATION	Male	Female	Totals
17. Other Infective and Parasitic diseases .....	.....	1	1
18. Malignant Neoplasms	4	2	6
22. Vascular Lesions affecting C.N.S.	4	2	6
26. Arteriosclerotic and degenerative Heart Disease....	7	6	13
27. Other diseases of the Heart	4	4	8
28. Hypertension with Heart Disease .....	.....	1	1
30. Influenza .....	.....	4	4
31. Pneumonia	12	9	21
45. Senility, etc., and ill-defined causes	3	3	6
46. All other diseases	2	.....	2
TOTALS	36	32	68

TABLE 9
DEATHS BY PSYCHOSES

Psychosis due to Syphilis	2	.....	2
Schizophrenia	4	4	8
Manic Depressive	2	3	5
Involuntal .....	.....	1	1
Paranoid Conditions	3	.....	3
Senium	6	10	16
Psychosis with Cerebral Arteriosclerosis	11	7	18
Psychosis of other demonstrable etiology	4	3	7
Other and unspecified Psychoses	2	1	3
Mental Deficiency	1	.....	1
Epilepsy .....	.....	1	1
Other non-Psychiatric conditions	1	.....	1
TOTALS	36	32	68

PROVINCIAL MENTAL INSTITUTE, EDMONTON

A. D. MACPHERSON, M.D., *Medical Superintendent*

On December 31, 1957, there were in residence 1,036 male patients and 507 female patients. On leave or otherwise absent were 63 male patients and 40 female patients. The total patient population at the end of the year was 1,099 males and 547 female patients. This is a total of 1,646 patients, an increase of 5 over the previous year.

6 patients were transferred here from other mental hospitals. During the year there were 836 admissions. This is an increase of 42 over the previous year.

There were 688 discharges in 1957, a decrease of 42 over last year. 51 patients were transferred to other mental hospitals and there were 85 deaths (autopsied). Most of these deaths were in the senile group.

General Health

This has been good during the year. There were no serious epidemics. T.A.B. immunization was carried out on all new admissions and all new staff, and booster doses were given where required. Chest X-rays were done on all new admissions and new staff, and also a complete resurvey on all patients and staff.

Treatment of Patients

Electro Shock Therapy was given to 401 patients, and Insulin Shock Therapy to 126. Combined E.S.T. and I.S.T. was given in a few cases. Periodic supporting treatment (E.S.T.) was given in a considerable number of cases. Group Therapy was continued and found to be very helpful.

The use of Ataractic drugs was continued during the year. Largactil was found to be the most effective, Serpasil effective in certain cases but not generally effective. Equanil was found to be very effective in neurotic conditions. Trilafon was used during the last half of the year. The results were very good in a considerable number of cases, but the response was more variable than to Largactil. Some patients appeared to be disturbed by Trilafon and treatment had to be discontinued. The results in the case of chronically disturbed patients were very good. The response of new admissions was more variable. We have found that the use of these drugs has made the patients much more accessible and has improved the atmosphere of the wards remarkably. We feel that these preparations are of great value in making the patients more accessible.

Occupational Therapy

This department remains very active. Work is now done on most of the wards as well as in the main Occupational Therapy

Building. The average daily attendance is 250 patients. All patients on acute treatment attend as well as a large number of continued treatment patients. Many of the chronic patients attend the classes on the wards.

Social Service

This work is of great importance to us in the investigation of new patients, rehabilitation of discharged patients, group therapy and public relations. In addition the Social Worker carries out group therapy and supervises the Correspondence School work. This group was small this year, but all patients completed the work satisfactorily.

Recreational Program

The full-time program has continued. This takes in all wards and almost all forms of recreational activity. The D.V.A. has continued to assist us in providing stage shows, tickets to many activities in the city and dance orchestras. The Canadian Mental Health Association has continued to send groups to our patients' dances. Their interest has been increasing and the size of the groups has become much larger.

Library

This department has been very active during the year. New volumes were added.

Beauty Parlor

This department has remained very active. About 40 patients attend per day.

X-ray Department

This department continues to be very active. A total of 5,689 examinations was done. This is slightly less than during the previous year. In addition the department carried out B.C.G. work.

Electroencephalograph

This department remained very active. A total of 339 E.E.G.'s and 93 E.C.G.'s and 55 B.M.R.'s was done during the year. In addition the technician continued the E.E.G. work at Ponoka.

Laboratory

The work of this department was increased slightly over last year. A total of 13,592 procedures were carried out. This is a slight decrease of approximately 1,286 over the previous year.

Both the laboratory and X-ray departments assisted in the training given by the Department for technicians from the Department's School for Laboratory and Radiological Technicians.

Surgical Services

During the year 29 major operations and 47 minor operations were carried out, 13 casts applied.

Dental Department

A total of 5,179 treatments were carried out during the year. All types of dental work were done. All patients in the hospital were examined during the year and wherever required, treatment was done. In addition, the dentist also did work at Rosehaven, Camrose, and held clinics for dental students at the University of Alberta.

Training School

15 students graduated in Psychiatric Nursing in 1957, completing the three-year course. There were 69 students in the various years of the three-year course. Clinics and demonstrations were given to the students of the graduating classes from three of the city hospitals during the year. The Affiliation Training Program for final year students from the Royal Alexandra, Misericordia, and General Hospitals, Edmonton, and Holy Cross Hospital, Calgary, and B.Sc. classes, was continued. An average of 24 students are given a two-month course with lectures, clinics and ward experience.

Department of Building and Maintenance

The maintenance work was kept up very well throughout the year as usual. Extensive re-painting was done in addition to the other work.

Fire Protection

Fire practices were held at regular intervals. Inspections were carried out by the Fire Protection Branch. There were no fires.

Farm

Farm operations were very successful. The crop was excellent. The dairy herd did very well. Milk production was very high.

Garden

The garden crop was very good but some difficulty was experienced in harvesting, due to the excessive rain.

Laundry

No equipment was added during the year. This department does very good work.

Tailor Shop

This department was also very busy. A great amount of work was done during the year.

Shoe Shop

This department remains very busy and active.

Sewing Room

This department does very good work in repairing damaged and worn clothing.

Dietary Department

Continues to function very well. Nothing of note has occurred in this department.

Religious Services

The Lutheran minister has care of the work for the Lutheran Church. He holds services every Sunday and brings out choirs and other entertainment groups frequently. Roman Catholic services are held every Sunday. The Anglican and United Churches provide services on alternate Sundays. The Jewish, Lutheran and Ukrainian women's organizations visit patients frequently. The Chinese Benevolent Association also visits the hospital.

Police Court

This service continued to be very busy. A considerable number of remands were seen during the year, as well as people in the Police Court who were not remanded. There were a total of 266 remands during the year.

Business Office

This office continues to function in its usual efficient manner.

Medical Records Office

The work of this department is done very efficiently.

Staff

The staff situation, both male and female, has remained good. There has been little difficulty keeping the establishment filled.

Visitors

During the year the hospital was visited by the Hon. Dr. Cross, Hon. Dr. Ross, Hon. Mr. Taylor and Dr. MacLean, and the Visiting Board carried out its annual inspection in the fall. These visits were very much appreciated.

Public Relations

Members of the staff have continued to address public organizations whenever possible on the work of the hospital and the problems in the psychiatric field. These contacts were very useful and we would like to see them increased.

The final year students from the University of Alberta Medical School were given regular clinics during the year.

TABLE 1
MOVEMENT OF PATIENT POPULATION DURING 1957

	M	F	T	M	F	T
In residence December 31, 1956				1022	490	1512
On leave or otherwise absent				77	45	122
Total on books December 31, 1956				1099	535	1634
ADMISSIONS:						
FIRST ADMISSIONS:						
(a) Voluntary	72	51	123			
(b) Medical Certificates	110	108	218			
(c) Warrant	163	50	213			
(d) Mental Defectives Act	4	5	9			
Total	349	214	563			
READMISSIONS:						
(a) Voluntary	69	56	125			
(b) Medical Certificates	25	33	58			
(c) Warrant	52	29	81			
(d) Mental Defectives Act	2	1	3			
Total	148	119	267			
TRANSFERS IN:	4	2	6			
TOTAL ADMISSIONS:	501	335	836			
SEPARATIONS:						
DISCHARGES:						
(a) Recovered	99	120	219			
(b) Improved	228	148	376			
(c) Unimproved	6	3	9			
(d) Unchanged	71	13	84			
Total	404	284	688			
TRANSFERS OUT:	31	20	51			
DEATHS:	66	19	85			
TOTAL SEPARATIONS:	501	323	824			
Total on books December 31, 1957				1099	547	1646
On leave or otherwise absent				63	40	103
Total in residence December 31, 1957				1036	507	1543

TABLE 2
PSYCHOSES OF THE PATIENT POPULATION DECEMBER 31, 1957

	Male	Female	Total
300 Schizophrenic Disorders	607	270	877
301 Manic Depressive Reaction	42	30	72
302 Involutional Melancholia	6	15	21
303 Paranoia and Paranoid States	37	14	51
304 Senile Psychosis	25	25	50
305 Presenile Psychosis	1	6	7
306 Psychosis with Cerebral Arteriosclerosis	20	13	33
307 Alcoholic Psychosis	8	2	10
308 Psychosis of Other Demonstrable Etiology	34	10	44
309 Other and Unspecified Psychosis	63	34	97
310 Anxiety Reaction without mention of Somatic Symptoms	2	2	4
313 Obsessive-Compulsive Reaction	1	1	2
314 Neurotic-Depressive Reaction	5	6	11
318 Psychoneurotic Disorders, Other, Mixed and Unsuspected	2	2	4
320 Pathological Personality	13	6	19
321 Immature Personality	1	1	2
322 Alcoholism	13	4	17
323 Other Drug Addiction	1	1	2
324 Primary Childhood Behaviour Disorders	4	3	7
325 Mental Deficiency	168	84	252
326 Unspecified Character, Behaviour and Intelligence Disorders	1	1	2
020.1 Juvenile Neurosyphilis	1	1	2
024 Tabes Dorsalis	1	1	2
025 General Paralysis of Insane	1	1	2
026 Other Syphilis of Central Nervous System	29	6	35
083 Late Effects of Acute Infectious Encephalitis	3	1	4
353 Epilepsy	4	2	6
688.1 Puerperal Psychosis	5	8	13
793.0 Observation without need of further Psychiatric Care...	4	1	5
Total	1099	547	1646

TABLE 3
PSYCHOSIS BY FIRST ADMISSIONS—1957

	Male	Female	Total
300 Schizophrenic Disorders	70	67	137
301 Manic Depressive Reaction	10	10	20
302 Involutional Melancholia	9	14	23
303 Paranoia and Paranoid States	6	4	10
304 Senile Psychosis	27	20	47
305 Presenile Psychosis	2	2	4
306 Psychosis with Cerebral Arteriosclerosis	37	13	50
307 Alcoholic Psychosis	9	1	10
308 Psychosis of Other Demonstrable Etiology	16	5	21
309 Other and Unspecified Psychosis	3	2	5
310 Anxiety Reaction without Mention of Somatic Symptoms	5	7	12
311 Hysterical Reaction without Mention of Anxiety Reaction	2	5	7
314 Neurotic-Depressive Reaction	13	12	25
318 Psychoneurotic Disorders, Other, Mixed and Unspecified Types	8	5	13
320 Pathological Personality	61	17	78
321 Immature Personality	4	7	11
322 Alcoholism	34	5	39
323 Other Drug Addiction	1	1	2
325 Mental Deficiency	10	7	17
324 Primary Childhood Behaviour Disorders	6	3	9
025 General Paralysis of Insane	2	...	2
026 Other Syphilis of Central Nervous System .....	...	1	1
353 Epilepsy	4	1	5
793 Observation without Need for Further Medical Care	10	5	15
Total	349	214	563

TABLE 4
NATIVITIES OF PATIENTS ADMITTED DURING 1957

Country	Male	Female	Total
Australia	0	1	1
Austria	4	5	9
Belgium	1	...	1
China	3	...	3
Canada	356	252	608
Czechoslovakia .....	...	2	2
Denmark	4	1	5
England	24	16	40
Estonia	1	...	1
Finland	1	...	1
France	2	1	3
Germany	7	7	14
Holland	2	2	4
Hungary	7	3	10
Iceland	1	...	1
Ireland	6	...	6
Italy	2	...	2
Jamaica .....	...	1	1
Malta	1	...	1
Norway	4	2	6
Poland	16	9	25
Rumania .....	...	2	2
Russia	7	2	9
Scotland	9	3	12
Sweden	3	2	5
Ukraine	11	9	20
U.S.A.	23	13	36
Wales	4	1	5
Yugoslavia	2	1	3
Total	501	335	836

TABLE 5
AGES OF PATIENTS ADMITTED DURING 1957

Ages	First Admission			Readmission			Transfers			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Under 15 years	6	2	8	1	...	1	1	...	1	8	2	10
15 to 19 years	19	14	33	9	4	13	...	...	...	28	18	46
20 to 24 years	27	29	56	9	13	22	1	...	1	37	42	79
25 to 29 years	42	27	69	15	8	23	...	...	...	57	35	92
30 to 34 years	42	23	65	21	15	36	...	...	...	63	38	101
35 to 39 years	39	19	58	19	22	41	...	...	...	58	41	99
40 to 44 years	34	17	51	15	21	36	...	2	2	49	40	89
45 to 49 years	22	17	39	15	14	29	...	...	...	37	31	68
50 to 54 years	19	15	34	22	8	30	...	...	...	41	23	64
55 to 59 years	11	6	17	7	3	10	...	...	...	18	9	27
60 to 64 years	16	9	25	7	4	11	1	...	1	24	13	37
65 to 69 years	12	8	20	3	2	5	...	...	...	15	10	25
70 and over	60	28	88	5	5	10	1	...	1	66	33	99
Total	349	214	563	148	119	267	4	2	6	501	335	836

TABLE 7
DISCHARGES DURING 1957 SHOWING DURATION OF RESIDENCE IN HOSPITAL

PSYCHOSIS	Under 3 mths.		Under 6 mths.		Under 9 mths.		Under 12 mths.		Under 18 mths.		Under 2 years		Over 2 years		TOTAL					
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
300 Schizophrenic Disorders	24	39	63	28	42	70	26	11	37	13	13	6	19	4	2	6	13	116	118	234
301 Manic-Depressive Reaction	8	9	17	2	6	8	3	5	8	1	3	4	1	1	1	1	15	24	38	24
302 Involutional Melancholia	4	6	10	2	7	9	2	1	3	1	1	1	1	1	1	1	8	16	24	24
303 Paranoia and Paranoid States	3	1	4	1	2	3	1	1	2	1	1	1	1	1	1	1	5	10	15	25
304 Senile Psychosis	1	1	2	3	1	4	1	1	1	1	1	1	1	1	1	1	6	4	2	6
305 Psychosis with Cerebral Arteriosclerosis	11	4	15	2	2	1	1	1	1	1	1	1	1	1	1	1	15	4	2	19
306 Alcoholic Psychosis	7	1	8	1	1	1	5	1	1	1	1	1	1	1	1	1	3	1	15	3
307 Psychosis of Other Etiology	5	3	8	3	1	3	1	1	1	1	1	1	1	1	1	1	4	13	6	18
308 Other and Unspecified Etiology	4	8	12	1	1	2	3	1	1	1	1	1	1	1	1	1	2	3	5	8
309 Anxiety Reaction without Somatic Symptoms	4	4	8	4	4	8	1	1	1	1	1	1	1	1	1	1	5	10	5	11
310 Hysterical Reaction	4	4	8	4	4	8	1	1	1	1	1	1	1	1	1	1	5	10	5	16
311 Obsessive-Compulsive Reaction	10	9	19	3	5	8	1	2	2	1	1	2	2	1	1	1	15	18	33	1
312 Neurotic-Depressive Reaction	5	3	8	2	1	3	7	1	1	1	1	1	1	1	1	1	4	12	4	12
313 Psychoneurotic Disorders	68	15	83	3	4	7	1	1	8	1	1	1	1	1	1	1	80	20	100	10
314 Pathological Personality	4	6	10	1	1	1	1	1	1	1	1	1	1	1	1	1	7	12	63	7
315 Immature Personality	48	12	60	1	1	1	1	2	2	1	1	1	1	1	1	1	51	12	63	3
316 Alcoholism	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3
317 Other Drug Addiction	8	2	10	1	1	1	1	1	1	1	1	1	1	1	1	1	10	2	12	12
318 Primary Childhood Behaviour	4	4	8	1	1	1	1	1	1	1	1	1	1	1	1	1	10	2	12	12
319 Mental Deficiency	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	4	10	11	21
320 Unspecified Character, etc.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	1	2
321 General Paralysis of Insane	4	2	6	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	3	8
322 Epilepsy	11	5	16	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	3	10
793 Observation	236	137	373	53	73	126	52	27	79	19	21	40	20	13	33	7	404	284	688	16
Total	236	137	373	53	73	126	52	27	79	19	21	40	20	13	33	7	404	284	688	16

TABLE 8

DEATHS DURING 1957 BY ABRIDGED INTERNATIONAL STATISTICS CLASS

	Male	Female	Total
1 Tuberculosis of Respiratory System	1	....	1
18 Malignant Neoplasms .....	....	1	1
20 Diabetes Mellitus .....	....	2	2
22 Vascular Lesions Affecting Central Nervous System	10	2	12
25 Chronic Rheumatic Heart Disease	1	....	1
26 Arteriosclerotic and Degenerative Heart Disease	29	10	39
31 Pneumonia	16	1	16
38 Nephritis and Nephrosis	1	2	2
46 All Other Diseases	7	1	9
49 Suicide and Self-inflicted Injury	1	1	2
Total	66	19	85

TABLE 9

DEATHS DURING 1957 BY PSYCHOSES

	Male	Female	Total
300 Schizophrenic Disorders	12	2	14
301 Manic Depressive Disorders	2	1	3
302 Involutional Melancholia	1	....	1
303 Paranoia and Paranoid States	2	....	2
304 Senile Psychosis	13	3	16
305 Presenile Psychosis	3	....	3
306 Psychosis with Cerebral Arteriosclerosis	19	7	26
307 Alcoholic Psychosis	1	....	1
308 Psychosis of Other Demonstrable Etiology	7	3	10
314 Neurotic Depressive Disorders .....	....	1	1
322 Alcoholism	2	....	2
325 Mental Deficiency	3	....	3
353 Epilepsy	1	1	2
025 General Paralysis of Insane .....	....	1	1
Total	66	19	85

TABLE 10

NUMBER OF OFFICERS AND EMPLOYEES ACCORDING TO CATEGORIES

	Male	Female	Total
Medical Superintendent	1	....	1
Assistant Medical Superintendent	1	....	1
Medical Officers	8	4	12
Interne .....	....	1	1
Dentist	1	....	1
Business Manager	1	....	1
Clerical and Stenographic Staff	7	12	19
Laboratory Technicians .....	....	3	3
X-ray Technicians	2	....	2
Occupational Therapists	1	....	1
Recreational Therapists	2	....	2
Psychologist .....	....	1	1
Electroencephalograph Technician	1	....	1
Nurses (General Graduates) .....	....	31	31
Nurses (Psychiatric Graduates)	88	47	135
Attendants and Ward Aides (non-student)	83	62	145
Attendants and Ward Aides (1st year)	10	17	27
Attendants and Ward Aides (2nd year)	10	1	11
Attendants and Ward Aides (3rd year)	8	6	14
Dietitians .....	....	2	2
Nurses' Home Staff .....	....	5	5
Kitchen Help	26	21	47
Cleaning Domestics .....	....	13	13
Laundry Help	4	14	18
Chauffeur	1	....	1
Garden and Farm Help	15	....	15
Engineers and Mechanical Help	23	....	23
Other Maintenance Help	26	....	26
Housekeeper .....	....	1	1
Shoemaker	1	....	1
Total	320	241	561

CHRONIC HOSPITALS

Provincial Auxiliary Mental Hospital, CLARESHOLM

Provincial Auxiliary Mental Hospital, RAYMOND

Rosehaven, CAMROSE

The Claresholm Auxiliary Mental Hospital has a patient population of 100 women. There are 31 Mental Defectives in this population. The average age of the patients, excepting the Mental Defectives, is over 62.

The patient population is kept at 100, chiefly by transfers from the other Mental Hospitals in the Province. One Mental Defective was admitted directly from the community.

The new unit to house all the patients is nearing completion and should be ready for occupancy early in 1958.

The Raymond Auxiliary Mental Hospital has a patient population of 133 women. There are 47 Mental Defectives in this population. The average age of the patients, excepting the Mental Defectives, is over 65.

The patient population is kept at 133, chiefly by transfers from the other Mental Hospitals in the Province. Two patients were admitted directly from the community.

"Rosehaven", CAMROSE, has a patient population of 510 usually. There are approximately 290 men and 220 women. The average age of the patients is over 80.

The patient population is kept up at the limit by transfers from the other Mental Hospitals in the Province. No patients are admitted directly from the community.

There were 91 deaths (56 men and 35 women) during 1957. Deaths were due chiefly to degenerative diseases and pneumonia. Four patients were discharged during the year and 34 were granted leaves-of-absence of varying periods of time, some for several weeks' duration.

The general health of the patients is excellent considering their ages.

Separate reports on each institution follow.

PROVINCIAL AUXILIARY MENTAL HOSPITAL,
CLARESHOLM

R. R. MACLEAN, M.D.

Movement of Patients—In residence in January, 1957 there were 96 patients and in residence December 31, 1957 there were 96 patients.

One patient was admitted under the Mental Defectives Act.

There were two patients transferred from the Provincial Mental Institute, Edmonton to this hospital.

One patient was transferred to the Provincial Mental Hospital, Ponoka for further psychiatric care.

There were two deaths during the year due to cardiac and degenerative conditions.

Accidents and Elopements—There were no elopements during the year and no accidents of a serious nature.

General Health—On the whole the general health of the patients was good. Many of the patients had 'flu in October but none was seriously ill. A local physician has made regular visits and has been most helpful at all times. The necessary X-Ray and laboratory tests were done at the Claresholm Municipal Hospital.

Occupational Department—The occupational department maintained its high standard of work. An annual sale was not held and the work was sold throughout the year.

The more deteriorated patients were kept occupied in the day room during the winter months. They do simple needlework, knitting, simple jig-saw puzzles, colouring and making scrap books. The patients are happier and less quarrelsome when there is staff available for this type of occupation.

Between twenty and twenty-five patients worked in the garden and grounds during the summer months under the supervision of a ward aide. Some of the patients do very little work but they enjoy getting outside and wandering about.

Recreational Activities—Bingo parties, the usual Christmas parties, and sports day were held. The occasional ball game and garden party were also enjoyed.

The United Church Choir, Salvation Army, and various choral groups brought their music to the hospital. These visits were much appreciated by the patients.

The Rebekah Lodge of Stavely and the F.W.U.A. of Pincher Creek sent gifts at Christmas. The group from Pincher Creek have sent clothing and items suitable for parties for small groups which have been much enjoyed.

Films were shown almost every week for the patients and most of the patients attend these shows.

Many of the patients enjoy television every day.

During the winter the patients went for daily walks when weather permitted. During the summer months all the patients went out on the lawns and around the grounds twice a day.

Beauty Parlour—The majority of the patients get their hair done and many were given permanents by the staff.

Religious Services—Local clergymen conducted services each Sunday afternoon. Roman Catholic services were conducted once a month.

Dentistry—The dentist from the Provincial Mental Hospital, Ponoka, visited the hospital in June and gave the necessary dental care. Emergency dental work was done by the local dentist who was most helpful.

Fire Protection—The buildings have been inspected by the fire inspector. Fire practices were held and equipment checked regularly.

Buildings—The necessary repairs to the buildings and equipment were carried out by the maintenance staff.

Gardens and Grounds—The vegetable crop was fairly good. There was some loss of vegetables due to the early snow in October.

Visitors—The Visiting Board visited the hospital in October.

Dr. R. R. MacLean, Director, Division of Mental Health, visited the hospital several times and his help and advice were greatly appreciated.

Relatives and friends visited the patients during the year.

TABLE 1
MOVEMENT OF PATIENT POPULATION DURING 1957

	M	F	T	M	F	T
In residence January 1, 1957	96	96
On leave or otherwise absent	1	1
ADMISSIONS						
First Admissions:						
(a) Voluntary
(b) Certificate
(c) Warrant
(d) M. D. Act	1	1	....	1	1
Re-Admissions:						
(a) Voluntary
(b) Certificate
(c) Warrant
(d) M. D. Act
Transfers	2	2	....	2	2
	0	100	100
Total Admissions	3	3	....	....	....
Separations:						
Discharges:						
(a) As recovered
(b) As Improved
(c) As Unimproved
Total Discharges
Transfers	1	1	....	1	1
Deaths	2	2	....	2	2
	3	3
Total Separations	97	97
On leave or otherwise absent	1	1
	96	96

TABLE 2

ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

CLASSIFICATION	Male	Female	Total
03 PSYCHOSES WITH EPIDEMIC ENCEPHALITIS	2	2
08 PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS....	1	1
10 PSYCHOSES WITH CONVULSIVE DISORDERS	1	1
11 (a) PRE-SENILE PSYCHOSES	1	1
16 PSYCHONEUROSES	1	1
17 MANIC-DEPRESSIVE PSYCHOSES	1	1
18 DEMENTIA PRAECOX (Schizophrenia)	53	53
19 PARANOIA AND PARANOID CONDITIONS	6	6
21 PSYCHOSES with MENTAL DEFICIENCY	8	8
23 WITHOUT PSYCHOSES	23	23
TOTAL	97	97

TABLE 3

CAUSE OF DEATH DURING 1957

ABRIDGED INTERNATIONAL CLASSIFICATION

CLASSIFICATION	Male	Female	Total
20 Diabetes Mellitus	1	1
31 Pneumonia	1	1
Totals	2	2

TABLE 4

DEATHS BY ORIGINAL PSYCHOSIS

Mental Defective .....	.....	1	1
Dementia Praecox .....	.....	1	1
Totals .....	.....	2	2

PROVINCIAL AUXILIARY MENTAL HOSPITAL,
RAYMOND

R. R. MACLEAN, M.D.

Movement of Patients

On January 1, 1957 there were one hundred and thirty-four patients in residence. During the year there were two first-admissions, one transfer from the Mental Institute, Edmonton and two re-admissions. Separations were two discharges, one transfer to the Mental Institute, Edmonton and three deaths, leaving in residence on December 31, 1957, one hundred and thirty-three patients.

Accidents and Elopements

There were no elopements. One patient fell sustaining a Colles' fracture of the left Radius which was placed in a cast and healed uneventfully.

General Health

All patients were given a complete physical examination. Two patients received a course of Electroshock Therapy. One patient developed an active Tuberculosis and was transferred to the Provincial Mental Institute, Edmonton. Forty-two percent of patients contracted "Asian Flu" with Gastro-intestinal symptoms but none became seriously ill. The three deaths are detailed in Tables 3 and 4 of this report.

Occupational Therapy

Patients are occupied in the Laundry, Sewing Room, Kitchen, Nurses' Home and on the Wards. A few patients help to pick vegetables in the garden and one patient has the responsibility of gathering the eggs. There is a full-time attendance by other patients in the Occupational Parlor where all kinds of needlework, knitting, rag rug making, painting, etc. is done. Tea is served each afternoon. A radio provides entertainment.

Library

The patients' library is situated in the Occupational Parlor. One new book is added each month. Current magazines are available from subscriptions or donations from local friends.

Religious Services

Both Catholic and United Church services are held at the hospital once monthly. These clergymen also preside at patients' funerals when required to do so.

Recreation and Entertainment

Picture shows are shown on the ward once a week and are eagerly attended. We received a television set this summer and all enjoy it very much as it provides a variety of entertainment every evening. We have also received a substantial record library for the record player and this provides music for dances and Sunday afternoon concerts. Special holidays are celebrated with a dance or party. In the summer a sports day is held and occasionally picnic suppers are served on the lawns. There is a radio and piano on the ward and also in the Annex sitting room.

Staff Changes

One ward aide resigned to move from the district. This vacancy was filled satisfactorily.

Visitors

Periodic visits of inspection were made by Department of Public Health, Public Works, Fire Department and Fire Inspector, Electrical and Boiler Inspector. The Provincial Visiting Board made its annual visit.

Gardens and Grounds

The lawns and flower beds improve each year and fresh cut flowers are now kept on the wards all summer. The trees and hedges are trimmed neatly giving a smart appearance. Fresh vegetables are brought in daily all summer from the garden. The yield of winter vegetables was very good and is keeping well in the root cellars.

Conclusion

The hospital capacity was maintained throughout the year. Natural gas for heating was installed in the boilers and is very satisfactory. The sewing room was moved to new, larger quarters and is much appreciated by the seamstress and helpers. The Asian Flu epidemic caused no serious shortage of staff at any one time although most contracted it eventually.

TABLE 1

MOVEMENT OF PATIENT POPULATION DURING 1957

In Residence January 1, 1957 .....				....	134	134
ADMISSIONS:	M	F	Total	M	F	Total
(a) Voluntary (M.D. Act)						
(b) Certificates		2	2			
(c) Warrant						
(d) Order						
(e) Transfers	1	1		....	3	3
				0	137	137
RE-ADMISSION:						
(a) Voluntary	1	1				
(b) Certificates	1	1				
(c) Warrant						
(d) Order					2	2
(e) Transfers .....				....	139	139
SEPARATIONS:						
(a) As recovered						
(b) As improved	1	1				
(c) As unimproved		1	1			
(d) Transferred to other hospitals	1	1				
(e) Eloped						
(f) Deported						
(g) As with Psychosis						
(h) Deaths	3	3		....	6	6
				....	133	133
In Residence December 31, 1957 .....				....	133	133

TABLE 2

ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

	Male	Female	Total
300 Schizophrenic Disorders	60	60
300.1 Manic-Depressive Reactions	6	6
303 Paranoia and Paranoid States	9	9
304 Senile Psychosis	6	6
306 Psychosis with Cerebral Arteriosclerosis	1	1
308 Psychosis with other Demonstrable Etiology	4	4
309 Other and unspecified Psychosis	8	8
325 Mental Deficiency	38	38
025 General Paresis of Insane	1	1
	133	133

TABLE 3

CAUSES OF DEATH DURING 1957

ABRIDGED INTERNATIONAL CLASSIFICATION

CLASSIFICATION	Male	Female	Total
22 Vascular Diseases of Central Nervous System	1	1
27 Other Disease of Heart	1	1
31 Pneumonia	1	1
Totals	3	3

TABLE 4

DEATHS BY ORIGINAL PSYCHOSIS

325 Mental Deficiency .....	....	3	3
Totals .....	....	3	3

ROSEHAVEN, CAMROSE

R. R. MACLEAN, M.D.

Movement of Residents

On January 1, 1957, the resident population at Rosehaven numbered 505, of which 285 were men and 220 women. The total number in residence on December 31, 1957 was 501; 284 men, 217 women.

There were 126 residents admitted to Rosehaven during 1957. Of this number 59 were received from the Provincial Mental Hospital, Ponoka, 36 from the Provincial Mental Institute, Edmonton, one was re-admitted and 30 returned from leave of absence.

Separations from Rosehaven during 1957 numbered 130 during the year, 91 of these were attributable to death, four were discharged, one was transferred to the Provincial Mental Institute and 34 went on leave of absence.

Admissions throughout the year were in the form of transfers from other institutions in Alberta and filled beds made available by deaths or transfers. The average daily population was 502.7.

Deaths were due to degenerative causes.

Accidents and Elopements

During the year a number of residents received injuries either from accidental falls or as a result of interference from other residents. Some of these resulted in contusions or lacerations of a minor nature and required only first aid treatment. In other instances, more extensive treatment was necessary and involved hospitalization following fractures or suturing of lacerations. There were 24 fractures, eight lacerations requiring special care, 16 other injuries requiring X-ray investigations or bed care. A number of patients left the grounds without permission but only in four cases, police assistance was requested. All were returned without incident.

General Health

The general health of the residents was considered good in view of the age of these individuals. A progressive mental and physical decline in most cases, makes an increasing amount of nursing care necessary.

An average of 80 patients required infirmary care each month. During the year, 30 patients required care at St. Mary's Hospital for surgical, orthopedic or diagnostic attention. Out-patients' work done at St. Mary's for Rosehaven consisted of 82 blood counts, 15 urinalyses and 11 miscellaneous tests as well as 26 X-rays. All residents were X-rayed by the Mobile Chest Unit in May.

Medical care was supplied by the Smith Clinic, Camrose.

Dental examinations and necessary dental treatments were done twice a year by the dentist from the Provincial Mental Institute, Edmonton. Emergency work was done by a local dentist.

Occupational Therapy

Organized occupational therapy classes were commenced. Groups from each ward have attended in rotation, averaging 52 residents at classes twice a week. A successful bazaar was held in December and articles made by the residents sold readily. An average of 20 residents worked on institutional services—laundry, kitchen or garden. The average number employed on wards in light housekeeping duties was 85.

Religious Services

Weekly Protestant Church services were held at Rosehaven and were arranged by the local Ministerial Association. These were well attended with an average of 116 residents present. Roman Catholic services were held several times during the year.

Recreation

Walking parties and lawn groups were taken out each day, weather permitting. An average of 250 residents were out on days in the summer. 150 residents have been given special ground privileges and were out almost daily. A movie film was shown every other week with an average of 205 residents in attendance. Parties in the form of bingo, tea dances and cards were arranged each month for the residents. Cards and games have been supplied to the wards. Television and radio sets are available for the majority of residents. One local organization has sponsored car rides twice during the year for the residents and entertained at a Christmas concert. Ex-servicemen are visited regularly by members of the Ladies' Auxiliary to the Canadian Legion who arrange outings, as well as a Christmas party for them.

Buildings

Construction on a new carpenter shop was commenced in the fall.

The buildings have been well maintained and repairs done promptly.

Garden and Grounds

A new garden court was constructed and further landscaping of the grounds done.

Staff

The general health of the staff has been good. Vacancies on the staff establishment created by resignations have been readily filled. Chest X-rays were done on all staff by the Mobile Chest Unit. T.A.B. vaccine has been given and Asiatic flu vaccine given to most of the staff members.

Visitors

The Minister of Health visited during the year.

Regular visits were made to Rosehaven by the Director of Mental Health.

An annual visit was made by the Visiting Board.

DEPARTMENT OF PUBLIC HEALTH

TABLE 1
MOVEMENT OF POPULATION DURING 1957

	M	F	T	M	F	T
In residence December 31, 1956 .....	....	....	....	285	220	505
ADMISSIONS:						
From P.M.H., Ponoka	37	22	59			
From P.M.I. Edmonton	23	13	36			
Returned from L.O.A.	14	16	30			
Re-admitted .....	....	1	1			
	74	52	126	74	52	126
				359	272	631
SEPARATIONS:						
Formal Discharges	3	1	4			
Trans. to P.M.I.	1	....	1			
On L.O.A.	15	19	34			
Deaths	56	35	91			
	75	55	130	75	55	130
				284	217	501
Total in residence December 31, 1957						

TABLE 2
ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

300	SCHIZOPHRENIC DISORDERS	106
301	MANIC DEPRESSIVE REACTION	16
303	PARANOIA and PARANOID STATES	39
304	SENILE PSYCHOSES	172
306	PSYCHOSES with CEREBRAL ARTERIOSCLEROSIS	107
308	PSYCHOSES of DEMONSTRABLE ETIOLOGY	10
309	OTHER and UNSPECIFIED PSYCHOSES	11
	PSYCHONEUROTIC DISORDERS	1
320	PATHOLOGICAL PERSONALITY	1
321	IMMATURE PERSONALITY	2
322	ALCOHOLISM (Exc. 307)	3
323	OTHER DRUG ADDICTION (Exc. 308.6)	1
325	MENTAL DEFICIENCY (Exc. 309.1)	7
024	TABES DORSALIS	1
025	GENERAL PARALYSIS OF INSANE	3
026.1	PSYCHOSES with OTHER SYPHILIS of C.N.S.	4
930	NOT PSYCHOTIC	17
		501

TABLE 3
CAUSES OF DEATH DURING 1957
ABRIDGED INTERNATIONAL CLASSIFICATION

	Male	Female	Total
18 Neoplasms, Malignant	2	2	4
22 Vascular Disease of Central Nervous System	11	4	15
26 Arteriosclerotic and Degenerative Heart Disease	8	6	14
27 Other Diseases of Heart	5	1	6
31 Pneumonia	29	22	51
46 All other Diseases	1	....	1
TOTALS	56	35	91

TABLE 4
CLASSIFICATION OF DEATHS ACCORDING TO ORIGINAL PSYCHIATRIC
DIAGNOSIS, 1957

DISEASE	Male	Female	Total
SCHIZOPHRENIC DISORDERS:			
Hebephrenic .....	....	1	1
Catatonic .....	....	1	1
Paranoid	5	1	6
MANIC DEPRESSIVE REACTION	2	1	3
PARANOID and PARANOID STATES	6	2	8
SENILE PSYCHOSIS	17	21	38
PSYCHOSIS WITH ARTERIOSCLEROSIS	15	6	21
MENTAL DEFICIENCY	1	1	2
NOT PSYCHOTIC	4	....	4
PSYCHOSIS WITH OTHER BRAIN DISEASE .....	....	1	1
UNDIAGNOSED	4	....	4
PSYCHOSIS WITH EPILEPSY	1	....	1
INVOLUTIONAL MELANCHOLIA	1	....	1
TOTALS	56	35	91

INSTITUTIONS FOR MENTAL DEFECTIVES

The Provincial Training School, RED DEER

Deerhome, RED DEER

The Provincial Training School, RED DEER, has a patient population of 707 (395 males and 312 females). Of these, 442 are 15 years of age or over. The Training School operates at full patient capacity continuously, because of the waiting list from which beds are filled as they become vacant.

Emphasis is placed on training which may facilitate the discharge of the patients. Fifty-three were discharged during the year. This is a very large number for an institution of this nature. There were six deaths.

The staff training program is designed to train staff members in the nursing and general care and training of the mentally deficient children in the institution.

A new infirmary ward under construction will be ready for occupancy early in 1958. The new clinical building was completed during the current year.

The Deerhome Institution is nearing completion in part. The utilities building, kitchen and two wards will be ready for occupancy early in 1958.

In the first instance, the mentally deficient patients now residing in the mental hospitals of the province, and a number of adult defectives now in the Provincial Training School, will be transferred to DEERHOME. Such transfers will make beds available in the latter institutions for future admissions.

TABLE OF ADULT DEFECTIVES IN ALL INSTITUTIONS IN THE ALBERTA
DIVISION OF MENTAL HEALTH—YEAR ENDING DECEMBER 31st, 1957

INSTITUTION	MENTAL DEFECTIVES		
	Male	Female	Total
PROVINCIAL MENTAL HOSPITAL, PONOKA	154	76	230
PROVINCIAL MENTAL INSTITUTE, EDMONTON	231	118	349
PROVINCIAL AUXILIARY MENTAL HOSPITAL, CLARESHOLM	—	31	31
PROVINCIAL AUXILIARY MENTAL HOSPITAL, RAYMOND	—	47	47
—	—	—	—
TOTAL ADULT MENTAL DEFECTIVES IN MENTAL HOSPITALS	385	272	657
PROVINCIAL TRAINING SCHOOL, RED DEER (over 15)	245	197	442
GRAND TOTAL	630	469	1099

From the above table it will be seen that there are 657 Adult Defectives in all the Mental Hospitals combined, and 442 (of the

age of 15 and over) in the Provincial Training School, RED DEER.

It will be apparent from the table that the eventual transfer of the Mental Defectives from the Mental Hospitals will result in many beds being made available for current admissions, and will relieve any overcrowding which might exist in any particular Mental Hospital. The ultimate transfer of the Adult Defectives from the Provincial Training School, RED DEER, likewise will make beds available there for new admissions, and a decrease in the average age of the population in that institution.

PROVINCIAL TRAINING SCHOOL, RED DEER

L. J. LEVANN, M.D., *Medical Superintendent*

In Residence, Admissions, Discharges, Deaths

There has been approximately a 2% increase of patient days during the year.

29 new admissions were taken into the School, of which 14 were males and 15 females. There were a total number of 41 re-admissions during the year, making the total number of admissions 70.

There were 53 discharges, 34 males and 19 females. One patient was transferred to the Provincial Mental Hospital and one patient was transferred to the Cerebral Palsy Clinic. There was a total of six deaths. Three of these deaths were associated with post influenzal complications.

Applications for Admission

Applications for admission were in excess of last year's, the yearly trend being for a slight increase over the previous year. A total of 127 applications were received.

Eugenics Board Visits, Sterilizations, etc.

The Eugenics Board visited on four occasions and the Visiting Board visited in September, making a complete round of the Hospital. There were 32 cases presented to the Eugenics Board and 33 trainees were sterilized, 22 males and 11 females.

Staff Changes and Activities

The staff situation has remained static.

Health of Trainees and Staff

There has been only one serious health problem during the year and this was presented by the Asiatic Influenzal Epidemic. The entire trainee population with the exception of approximately 50 to 60 of the lower grade population all developed Asiatic Flu and there were three deaths as direct sequelae of this illness.

Immunization procedures were carried out against Diphtheria, Whooping Cough, Enteric Fevers and also against Poliomyelitis for all the patients who had been missed the previous year, due to insufficient supply of Salk Vaccine. Staff members were also immunized with Salk Vaccine, each staff member receiving two injections.

There were no discoverable cases of Tuberculosis.

Dental care has continued with a part-time Dentist serving the School two mornings per week.

Training Program for Nurses and Attendants

This continued as during previous years and is a well attended feature. All training classes are becoming somewhat larger and there is less fall-out each year.

In order to give Second Charges greater orientation and adaptability in relation to ward administration, they are now being alternated to new wards on a three-monthly basis, rather than keeping them fixed on one ward as obtained during previous years. This entails a greater availability of senior and graduate nursing and attendant staff, should there be any emergency wherein they might be required on any ward.

Training Program for Trainees

The School continues to provide academic education up to a Grade VII level. Several meetings were held this year, attended by the School Teachers and Medical Superintendent, in order to work out the fundamental plans to provide material for text books relating to the education of mentally defective children. Plans are now moderately advanced along this line and it is hoped that during the coming year it will be possible to have ready for publication Primers in Reading and Elementary Arithmetic books, suitable for all schools teaching retarded children. These books will, in fact, carry prescriptive techniques necessary to facilitate the teaching of both Reading and Arithmetic.

Children have taken many trips into town with their teachers in order to carry out shopping trips and have also attended farm exhibits and agricultural displays. 109 children have attended academic classes.

Sense Training

The Sense Training program has continued teaching children on a pre-school kindergarten level and there were a total of 79 children attending these classes.

Recreational Activities

Recreational facilities at the Training School have maintained their impetus of previous years. Group activities for older children have been maintained and hockey, broom ball, baseball and ice skating generally are welcomed features amongst the groups.

The trainees visited the Red Deer Fair and exhibited a commendable display of woodwork, fancywork, as well as displaying a Children's Playhouse, complete with furnishings, electrical wiring and radio.

141 children visited the Randall R. MacLean cottage at Gull Lake this year and an entirely new cottage with dimensions of the first one (24' x 50') was completed by five of the mid-grade boys and the Vocational Training Instructor, in just under one month.

A number of tricycles, wagons and bicycles were provided for recreational activities and two new projectors were purchased, one for the school and one for the recreation hall.

Occupational Therapy

There were 130 patients daily attending the Occupational Therapy Classes, taking part in sewing, weaving and soft toy making procedures.

Domestic Science Classes were also continued.

Additional loom tables and stools were purchased for the Occupational Therapy Department.

The shoemaker was provided with a new sole cutter and the Vocational Training Department received a band saw and portable sander.

The carpentry classes are continuing to turn out the same high grade standard of work and a board room for the school was panelled with mahogany plywood, window ledges cut and prepared by two trainees in four days. Average daily attendance at woodworking classes is between 30 and 40 trainees. Some 85 boys attend classes during the week.

Farm Instructor

Due to the rural character of this area it is still necessary to train the boys principally along farming techniques in order to prepare them for ultimate discharge from the School and the male trainees are given a thorough grounding in the care of machinery, farm work and harvest operations.

Shoemaker

The addition of this trade to the School has been of great help in providing occupational therapy for non-ambulant children, as well as the mid-grade trainees and has been most important in seeing that the School shoe repair program is up to date.

Extra Mural Activities

The Parent School Organization has now donated thirteen television sets so that every villa is provided with a T.V. set. They provided the monies necessary for the additional cottage at the Gull Lake site and have continued as a friendly appreciative group in relation to the administration and government.

A total of 94 children went home for the Easter holidays, 185 children went home for summer vacation and 132 went home for Christmas holidays during this year. This is in direct contrast to a period ten years ago when children rarely went home for holidays and parents ceased most obligations towards the children once they were admitted to the School.

The senior staff of the School gave 18 talks during the year to service clubs, Home and School Associations and women's groups.

Guidance Clinic psychiatric facilities were provided from this School for the Red Deer Clinic, Rocky Mountain House Clinic and the Calgary Guidance Clinic.

New Construction

During 1957 the Buildings Branch of the Department of Public Works has completed the Clinical Building, the Stores Addition to the Recreation Hall, the Stores Building Addition and has started the construction of a new Carpenter Maintenance Shop. Construction was completed on the new Infirmary Ward. New refrigeration units have been installed in the Stores Building and work has been started on the construction of a small Kitchen Addition with a ramp leading from the Stores to the Kitchen Area. Natural gas service has been installed in the farm area resulting in a complete conversion of the heating system in all farm buildings from coal to gas. Work was also started on a Tool Storage Building in the Greenhouse area.

Stores

The completion of the Stores Building Addition has greatly improved the facilities in this department and has enabled the establishment of a slightly higher Stores Inventory, which helps to provide better service to the other departments of this Institution. The installation of the refrigeration units makes it possible to store all pork from the farm, thus eliminating the locker rental paid to the local cold storage plant in previous years. It has also facilitated the delivery of packing house supplies in that larger shipments can now be accepted, thus eliminating some of the last minute menu changes made necessary when former weekly shipments failed to arrive on schedule.

Kitchen and Dining Room

The facilities of these Departments have been improved by the installation of a new and larger dishwashing machine, a large meat grinder, a rotary electric toaster and a new steam oven. Also some new chairs have been provided for the Staff Dining Room.

Laundry and Linen Repair Room

The operation of the Laundry has been improved by sending some of the excess wash to the Deerhome Laundry, which has enabled the staff of this department to cope more adequately with their work and put more effort into the improvement of the general quality of their work. Also, the amount of linen in the Central Linen Supply has been increased, which has eliminated some of the delays in the delivery of clean linen to the Wards.

A new set of laundry scales are in process of installation, which will enable the staff to arrive at more accurate soap and starch formulas.

An additional new stocking darning has been installed in the Linen Repair Room. The total number of new articles manufactured in this department has been about the same as the previous years.

Farm

Cereal crops yielded higher than in 1956 and were of exceptionally good quality. Barley yielded 80 bushels to the acre on summerfallow and one small 2-acre patch of certified oats grown for seed produced a total of 300 bushels. Hay crops were lighter than in 1956 due to the hot dry weather experienced in the spring, but some hay was carried over from the previous year, which will allow a sufficient amount of feed for this winter. Greenfeed yield was about average. Pastures suffered from lack of moisture during the early spring and summer months, but produced well later in the summer. Milk production decreased slightly from the previous year due to the death of one good cow and the disposal of two others owing to physical defects. Pork production was about the same and egg production showed an increase.

Garden

Most vegetables yielded well. Carrots, parsnips and beets about the same as the previous year. Turnips were average as to size and crop yield. The potato crop suffered frost damage on the 26th of August, which cut the yield considerably. Some difficulty was experienced in handling the cabbage crop owing to the early fall of snow, but the gardeners were able to save most of it. Increased greenhouse space would be useful inasmuch as it would greatly accelerate crop development and cut losses due to abnormal inclement weather.

Grounds

The area of landscaped grounds has continued to increase, making an estimated total of some 25 acres seeded to lawns. About 53,000 bedding-out plants were set out last spring, all of which were started from seed in the School's greenhouse. Twelve hundred yards of black dirt were levelled in various areas. Approximately 1,000 shrubs and trees were set out by the Lacombe Nurseries, these included some hedges, making a total of some 2,600 shrubs and trees to maintain. Newly landscaped areas included the grounds around the new Clinical Building and the southern end of the front slope. A new rock garden was built beside the steps on the front slope and an ornamental pool was constructed in the rockery at the Main Building. Also the lawn sprinkler has been extended to include more of the front slope as well as the area around the new Clinical Building.

Wards

The new Infirmary Ward was completely equipped with new furniture, equipment and furnishings. Various other Wards were supplied with replacement items such as beds, tables, chairs, cribs, polishers, etc., which were necessary to keep these areas properly equipped and furnished.

Service Departments

Some of the older items of equipment such as the dishwasher, meat grinder, toaster, etc., were replaced in the Kitchen and Dining Room area. New laundry baskets, a laundry scale and a stocking darning were purchased for the Laundry and Linen Repair Room. A major improvement in the farm area was the purchase and installation of a new swill cooker for the pig barn.

Appreciation

The Superintendent would like to express his thanks to the staff members under his supervision for the high calibre of work and effort they have put out on behalf of the School, particularly during the Influenzal Epidemic when even the School Teachers asked to be assigned to the wards to help in the nursing of the seriously ill, and to Dr. Randall R. MacLean, Director, Division of Mental Health, for his unceasing efforts on behalf of the School and his unfailing help at all times.

TABLE 1
MOVEMENT OF FEEBLEMINDED POPULATION

	M	F	T	M	F	T
Defectives on books of Institution as at 1st January, 1957				392	306	698
ADMISSIONS:						
1. First admissions—voluntary	14	15	29			
2. Re-admissions	25	16	41			
3. Transfers	—	—	—			
Total number of admissions	39	31	70	39	31	70
TOTAL NUMBER OF DEFECTIVES ON THE BOOKS DURING 1957				431	337	768
SEPARATIONS:						
1. Discharges	34	19	53			
2. Transfers—						
1 Female to P.M.H.						
1 Male to Cerebral						
Palsy Clinic	1	1	2			
3. Deaths	1	5	6			
Total number of outgoing	36	25	61	36	25	61
DEFECTIVES ON BOOKS OF THE INSTITUTION AT 31st DECEMBER, 1957....				395	312	707

TABLE 2
AGE OF RESIDENT POPULATION CLASSIFIED WITH REFERENCE TO MENTAL STATUS

AGE GROUP	IDIOT			IMBECILE			MORON			BORDERLINE			TOTALS		
	M		T	M		T	M		T	M		T	M		T
	M	F		M	F		M	F		M	F		M	F	
0 - 4	...	6	...	23	19	42	6	6	12	1	...	...	36	34	70
5 - 9	11	22	33	54	28	82	45	29	74	4	2	...	114	81	195
10 - 14	22	20	42	54	31	85	35	27	62	2	1	...	113	73	186
15 - 19	22	11	33	36	23	59	9	5	14	...	1	...	67	40	107
20 - 24	8	3	11	6	17	23	3	3	8	1	...	...	18	23	41
25 - 29	9	5	14	8	10	18	1	1	2	...	...	...	18	16	34
30 - 34	5	7	12	11	6	17	1	...	1	...	...	...	16	11	27
35 - 39	5	3	8	2	6	8	1	...	1	...	...	...	6	3	9
40 - 44	3	5	8	1	3	4	...	...	...	...	...	...	3	5	8
45 - 49	2	3	5	1	4	6	...	...	...	...	...	...	2	2	4
50 - 54	...	1	1	2	1	3	...	...	...	...	...	...	...	2	3
55 - 59	...	1	1	1	1	2	...	...	...	...	...	...	2	...	2
60 - 64	1	...	1	1	1	2	...	...	...	...	...	...	2	...	2
TOTALS	89	87	176	198	148	346	100	73	173	8	4	12	395	312	707

TABLE 3

MENTAL STATUS OF FIRST ADMISSIONS, READMISSIONS AND TRANSFERS

Mental Status	First Admissions			Readmissions			Transfers			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T
IDIOT	1	1	2	....	....	....	....	....	....	1	1	2
IMBECILE	3	6	9	4	7	11	....	....	....	7	13	20
MORON	7	6	13	19	8	27	....	....	....	26	14	40
BORDERLINE	3	2	5	2	1	3	....	....	....	5	3	8
TOTALS	14	15	29	25	16	41	....	....	....	39	31	70

TABLE 4

AGE GROUP OF FIRST ADMISSIONS, READMISSIONS AND TRANSFERS

Age Group	First Admissions			Readmissions			Transfers			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T
5 - 9	6	3	9	....	....	....	....	....	....	6	3	9
10 - 14	3	8	11	....	1	1	....	....	....	3	9	12
15 - 19	2	3	5	....	2	2	....	....	....	4	3	7
20 - 24	2	....	2	12	8	20	....	....	....	14	8	22
25 - 29	1	1	2	11	4	15	....	....	....	12	5	17
30 - 34 .....	....	....	....	....	....	....	....	....	....	....	....	....
35 - 39 .....	....	....	....	....	2	....	....	....	....	....	....	....
40 - 44 .....	....	....	....	....	2	....	....	....	....	....	2	2
45 - 49 .....	....	....	....	....	1	1	....	....	....	....	1	1
TOTALS	14	15	29	25	16	41	....	....	....	39	31	70

TABLE 5

DEATHS CLASSIFIED WITH REFERENCE TO CAUSE OF DEATH, AGE, MENTAL STATUS, YEARS IN RESIDENCE

Cause of Death	AGE	IDIOT			IMBECILE			MORON			YEARS IN RESIDENCE
		M	F	T	M	F	T	M	F	T	
27 Other diseases of Heart	38	....	....	....	....	1	1	....	....	....	2/10
	24/8	....	....	....	....	....	....	1	1	....	10/6
31 Pneumonia	11	....	1	1	....	....	....	....	....	....	2/2
	13/3	....	1	1	....	....	....	....	....	....	8/4
	19	....	1	1	....	....	....	....	....	....	15/1
	16/2	....	....	....	....	....	1	....	1	....	3/5
TOTALS .....	....	....	3	3	....	1	1	1	1	2	42/4

TABLE 6

DENTAL CARE

Examinations	1,375
General Anaesthetics	85
Extractions	190
Fillings (Silver)	107
Fillings (Silicate)	25
Prophylaxis	18
Scaling	5
Complete Dentures	1
Denture Repairs	4
Gold Inlay	1
X-rays	5
Gingivectomy	6

THE EUGENICS BOARD

The Eugenics Board for the Province of Alberta held eleven meetings during the year 1957. These meetings were held at the Provincial Mental Hospital, PONOKA, the Provincial Training School, RED DEER, and the Provincial Mental Institute, EDMONTON. The dates of the meetings held during 1957 were as follows:

February 1st, 1957	-	The Provincial Mental Hospital, PONOKA
February 1st, 1957	-	The Provincial Training School, RED DEER
April 12th, 1957	- -	The Provincial Mental Hospital, PONOKA
April 12th, 1957	- -	The Provincial Training School, RED DEER
May 31st, 1957	- - -	The Provincial Mental Hospital, PONOKA
May 31st, 1957	- - -	The Provincial Mental Institute, EDMONTON (Meeting held at the Provincial Mental Hospital, PONO- KA, for presentation of Provincial Mental Institute cases)
September 19th, 1957	The	Provincial Training School, RED DEER
September 20th, 1957	The	Provincial Mental Hospital, PONOKA
November 21st, 1957	- The	Provincial Mental Institute, EDMONTON
November 22nd, 1957	The	Provincial Mental Hospital, PONOKA
November 22nd, 1957	The	Provincial Training School, RED DEER

The Board considered a total of 129 cases, one of which was deferred. Of the 128 cases which were passed by the Board in accordance with The Sexual Sterilization Act (RSA-1955-C311), 46 were male and 82 female. Of this number 23 were passed subject to their own consent, and 2 were passed subject to consent of patient and parent.

Of the 128 cases passed by the Board during the year, 63 had been first examined at a Provincial Guidance Clinic, although some of these had been institutionalized prior to presentation. This group of 63 cases was made up of 24 males and 39 females.

Operations

Operations were performed on 82 cases during the year, 49 being male and 33 female. All of these operations were performed at the Provincial Mental Hospital, PONOKA, with the exception of three cases which were operated upon at the Provincial Mental Institute, EDMONTON, and one case which was operated upon at the University of Alberta Hospital, EDMONTON, by request and by special financial arrangement.

The surgical operations mentioned above were performed by the Surgical Consultants, Dr. J. W. Richardson, of CALGARY, or Dr. J. Ross Vant, of EDMONTON.

General

Dr. J. W. Richardson tendered his resignation as Surgeon to the Eugenics Board, to become effective on the last day of 1957. Dr. Richardson's appointment had been recommended by the Board at a meeting held at the Provincial Mental Hospital, PONOKA, on August the 8th, 1940, and he performed surgery on Eugenics Board cases for the first time on September the 3rd, 1940. Dr. Richardson took the place of Dr. Robert O'Callaghan who resigned in June, 1940, because he was leaving the province. A letter from the Eugenics Board to the Honourable the Minister of Health, Dr. J. Donovan Ross, in regard to Dr. Richardson's resignation, stated: "Dr. Richardson has always been highly regarded by the Board, both on account of his skill as a Surgeon and his personal qualities as a fine gentleman. He has always been most cooperative in the discharge of his duties."

Appreciation

As in previous years the Eugenics Board wishes to express its sincere appreciation and thanks to the Director, Division of Mental Health, to the Medical Superintendents and their staffs, and to the Guidance Clinics, for their cooperation in connection with the work of the Eugenics Board.

Tabular Summary

A tabular summary of the work of the Provincial Eugenics Board to December 31st, 1957, is appended.

CASES PRESENTED AND PASSED
(To 31st December, 1957)

Years	YEARLY TOTALS			CUMULATIVE TOTALS		
	Male	Female	Totals	Male	Female	Totals
1929-1933	87	201	288	87	201	288
1934-1938	557	438	995	644	639	1283
1939-1943	339	299	638	983	938	1921
1944	56	73	129	1039	1011	2050
1945	54	64	118	1093	1075	2168
1946	52	53	105	1145	1128	2273
1947	38	53	91	1183	1181	2364
1948	37	68	105	1220	1249	2469
1949	52	57	109	1272	1306	2578
1950	37	60	97	1309	1366	2675
1951	34	48	82	1343	1414	2757
1952	21	36	57	1364	1450	2814
1953	43	38	81	1407	1488	2895
1954	41	40	81	1448	1528	2976
1955	61	48	109	1509	1576	3085
1956	38	34	72	1547	1610	3157
1957	46	82	128	1593	1692	3285

OPERATIONS ONLY
(To 31st December, 1957)

Years	YEARLY TOTALS			CUMULATIVE TOTALS		
	Male	Female	Totals	Male	Female	Totals
1929-1933	48	158	206	48	158	206
1934-1938	198	240	438	246	398	644
1939-1943	122	151	273	368	549	917
1944	13	27	40	381	576	957
1945	18	29	47	399	605	1004
1946	24	31	55	423	636	1059
1947	16	15	31	439	651	1090
1948	16	22	38	455	673	1128
1949	20	27	47	475	700	1175
1950	21	46	67	496	746	1242
1951	16	41	57	512	787	1299
1952	6	18	24	518	805	1323
1953	21	30	51	539	835	1374
1954	37	25	62	576	860	1436
1955	45	25	70	621	885	1506
1956	22	24	46	643	909	1552
1957	49	33	82	692	942	1634

NATIONAL HEALTH GRANTS

1956 - 57 FISCAL YEAR

Since 1948 the Federal Government has assisted the public health services of the various provinces by the National Health Grants Program. These grants were devised for special purposes as outlined in the list below. Various amounts are made available to be distributed in relation to projects. The project must be recommended by the Provincial Department and approved by the Department of National Health.

In drafting the project, it is necessary to commit funds from the grant but, in the end, the full amount committed is not usually expended, so provinces usually do not manage to collect 100% of the possible grants.

The grants in relation to Venereal Disease, Cancer Control, Laboratory and Radiological Services, Child and Maternal Health, and Hospital Construction are "matching grants". That is, for services rendered under these grants, the Province must put up dollar for dollar with the Federal Government, although these grants may be used for professional training and for the purchase of equipment with the cost borne 100% by the Federal Government.

NATIONAL HEALTH GRANTS

ALBERTA

1956-1957

Grant	Amount of Grant	Amount Committed	Amount Expended	Percentage of Grant Expended
Crippled Children	\$ 36,604.00	\$ 36,604.00	\$ 36,604.00	100%
Professional Training	36,604.00	35,899.91	33,355.98	91.1%
Venereal Disease Control	36,604.00	36,604.00	36,604.00	100%
Mental Health	502,007.00	458,740.11	432,155.68	86%
Tuberculosis Control	249,875.00	230,335.00	219,811.39	87.9%
General Public Health	533,000.00	533,000.00	499,133.84	93.6%
Cancer Control	245,920.00	245,920.00	245,920.00	100%
Laboratory and Radiological Services	479,700.00	33,462.94	30,016.93	6.2%
Medical Rehabilitation	71,229.00	71,229.00	67,199.32	94.3%
Child and Maternal Health	135,168.00	121,045.00	118,676.55	87.7%
Hospital Construction	455,933.00	936,797.77	861,672.77	86.2%
TOTALS	\$2,782,644.00	\$2,739,637.73	\$2,581,150.46	77.6%

NOTE: The Hospital Construction Grant is an accumulative grant which accounts for the "Committed and Expended" figures being greater than the grant for the 1956-57 fiscal year. However, the percentage expended refers only to this year's grant.

BLOOD TRANSFUSION SERVICE

D. I. BUCHANAN, M.D., D.P.H., *Edmonton*

E. NATION, M.B., M.R.C.P., *Calgary*

No province in Canada, and to the best of our knowledge no transfusion centres anywhere possess a more technically complete, as well as free, blood transfusion service than Alberta. During the past ten years and up to the beginning of 1957, one quarter of a million blood transfusions had been administered to hospital patients in this area, the great majority having been crossmatched for the individual recipients in the two Alberta depots.

By January and February, 1957, however, it appeared that a combination of Red Cross financial difficulties, and difficulties in attracting qualified staff would greatly reduce the service insofar as crossmatching within the depots was concerned—although none of the hospitals were in a position to take over this technical responsibility.

Through the assistance of the Government of the Province of Alberta, by way of a grant of \$100,000.00 the first problem was met and later on the staffing situation became somewhat easier, culminating in a program whereby a small number of technicians were trained specially in this work—under the joint auspices of the University of Alberta, the Department of Public Health, and the Edmonton Red Cross B.T.S. It is desirable that this training program should be continued and expanded to take in a small number of student technicians from both the north and south of the province each year.

Voluntary Blood Donations

The total number of blood donations received during 1957 amounted to 54,027, as compared to 54,116 in 1956, 51,156 in 1955, and 54,330 in 1954.

The number of bottles collected in the north and south is shown in Table 1.

TABLE 1
BOTTLES COLLECTED, 1957

Jan. 1 to Dec. 31 (inclusive)	Permanent and City Mobiles		Field Mobile Clinics		
Northern Alberta	10,557	+	14,834	=	25,391
Southern Alberta	12,793	+	15,843	=	28,636
Total	23,350	+	30,677	=	54,027

Blood Transfusions

In Northern Alberta during 1957, 18,406 five hundred cc. bottles of blood were administered to a total of 9,369 patients.

In Southern Alberta during the same period 15,303 five hundred cc. bottles of blood were administered to a total of 7,502 patients.

Plasma for Fractionation Products

Apart from a small number of transfusions of fresh plasma (used primarily in cases of hemophilia) all liquid plasma is shipped to the Connaught Laboratories to be processed into the important plasma fractions serum albumin, gamma globulin, and fibrinogen.

Since in the Edmonton region the use of whole blood transfusions, and particularly *fresh* whole blood therapy had greatly expanded in 1957, there was a very considerable reduction in the amount of plasma available for the fractionation program. Only 258 *four-litre pools* were shipped from Edmonton in 1957 as compared to 402 *plasma pools* in 1956; whereas from Calgary 342 plasma pools were dispatched to the Connaught Laboratories in 1957, as compared to 447 four-litre pools in 1956. The supply of empty flasks from the National Red Cross in Toronto was inadequate for our requirements.

*Rh and Other Blood Group Investigations
(Obstetrical Cases, etc.)*

In the Edmonton laboratories 23,589 antenatal and postnatal blood samples were investigated during 1957, 24,030 having been tested in 1956.

In the Calgary laboratories, 14,672 antenatal and postnatal blood samples were tested in 1957, 13,413 being the corresponding total for the previous year.

Research

In 1957, another manuscript was prepared in our Edmonton centre on a locally discovered rare Rh blood type, this time in a Canadian family of German origin. Following the publication of the technical details, requests for reprints have been received from numerous countries throughout the world on both sides of the "Iron Curtain". The main value of such applied research is surely that any added knowledge tends to make transfusion therapy safer for a growing number of patients.

Again we would like to express our sincere thanks to the many volunteers and also staff who have made this service possible by their hard work.

PART II

ANNUAL REPORT

OF THE

HOSPITALS DIVISION

OF THE

DEPARTMENT OF PUBLIC HEALTH
PROVINCE OF ALBERTA

1957

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HOSPITALS DIVISION

J. D. CAMPBELL, B.COM., M.COM., F.C.A., R.I.A., *Director*

1. INTRODUCTION

Hospitals Division

The Division of Hospital and Medical Services operated as one division to June 30, 1957. To the end of 1956, that division compiled the Annual Report incorporating data on both hospital services and medical services. Effective July 1, 1957, that division became two separate divisions—the Hospitals Division and the Division of Medical Services—each with its own Director. Accordingly, this Annual Report of the Hospitals Division will deal solely with matters pertaining to hospitalization. Medical services data provided by the Division of Medical Services will be included elsewhere in this departmental report.

The Ministerial Order creating the separate divisions established the duties and responsibilities of the Hospitals Division as including all matters concerning all hospitals, except mental hospitals and tuberculosis sanatoria, covered under any plan of hospitalization operated by the Province of Alberta including facilities, hospital staff and administrative procedures which entail hospital expenditure. On the basis of this principle, the Order enumerated the duties of the Hospitals Division as follows:

1. Location and construction of hospitals.
2. Level of services rendered within a hospital.
3. Provision of consulting services involving the operation of a hospital to the extent and at such a time as it is considered necessary.
4. The supervision of administration of hospitals other than in respect to medical services rendered by the hospital medical staff.
5. All hospital and nursing training school grants.
6. The following regulations—
 - Hospital Act—Regulations 1-31 inclusive;
 - Regulations 70-75 and Fire Regulations;
 - Provincial—Municipal Hospitalization Plan Regulations.
7. Act as the liaison officer (provincial authority) in any matter arising in the field of hospitalization.

The Director of the Division of Medical Services is Medical Consultant to the Hospitals Division.

Acts to be Administered by Hospitals Division

The provincial statutes to be administered by the Hospitals Division are as follows:

- The Hospitals Act.
- The Hospitals Act
- The Municipal Hospitals Act.
- The Maternity Hospitalization Act.
- The Private Hospitals Act.

Other statutes with which the Hospitals Division is involved insofar as hospitalization is concerned are:

The Hospitalization and Treatment Services Act.
The Cancer Treatment and Prevention Act.
The Poliomyelitis Sufferers Act.

Hospital Insurance Planning Committee

On July 3, 1956, a Hospital Insurance Planning Committee of two persons was created to evolve a draft of a plan, together with any suggestions pertaining to legislation, for the consideration of the Minister and the Lieutenant Governor in Council, in the matter of programming a Hospital Insurance Plan. The planning committee met with various interested groups throughout the province with a view to giving and accepting information prior to drafting new legislation and regulations in order to eliminate to the extent possible the areas of difficulty in the existing plans. Briefs were received from The Associated Hospitals of Alberta, The College of Physicians and Surgeons of Alberta and The Canadian Medical Association (Alberta Division), and The Alberta Association of Registered Nurses. Resolutions were received from The Alberta Association of Municipal Districts and Union of Alberta Urban Municipalities.

The members of the Committee were subsequently appointed Director and Assistant Director of the Hospitals Division on creation July 1, 1957.

The Hospitalization Benefits Act

The Hospitalization Benefits Act was assented to by the legislature April 11, 1957, to come into force on a day to be fixed by proclamation of the Lieutenant Governor in Council. This Act was designed, in conjunction with the Municipal Hospitals Act, to be the foundation of the Alberta hospitalization program with a view to participating in the federally sponsored hospitalization insurance plan. The Hospitalization Benefits Act was not proclaimed during 1957. The several previously listed Acts remained in force throughout 1957 and have a direct bearing on the type of information contained in this report.

2. BENEFITS

Since the Acts listed above have been in effect for a number of years and as hospital benefits provided thereunder ceased March 31, 1958, with the coming into force April 1, 1958, of The Hospitalization Benefits Act, an itemized list of benefits by Acts is not included in this report. Generally speaking, insured benefits included hospitalization at standard ward level and special hospital services.

Standard ward care meant the bed accommodation provided to the patient when private or semi-private accommodation has not been requested and include the routine services such as meals, nursing care, drugs, medications and dressings ordinarily provided without extra charge.

Special hospital services included all hospital procedures, treatment, services, care, tests, drugs and dressings and medications as are not included in standard ward care and are necessary for the proper care, diagnosis and treatment of the patient with a limited number of stated exceptions. There were no changes in the exclusions during 1957.

Referred and emergency hospitalization inside or outside of the province were paid under the provincial-municipal hospitalization plan at a maximum rate of \$10.25 to June 30, 1957 and at a maximum rate of \$11.25 from July 1, 1957.

Out-patient services were not insured benefits and the responsibility for payment for such services rested with the patient.

3. COVERAGE

One of the aspects of the provincial-municipal plan was its voluntary nature. Municipalities and municipal hospital districts (a voluntary joining of 2 or more municipalities or portions thereof) voluntarily agreed to pay hospitals with which they had an agreement the rate set by this Division for hospitalization of its ratepayers and contract holders. The hospitals voluntarily signed the agreement to accept the payment as payment in full for standard ward care, except for per diem grants from the Department and an authorized co-insurance payment by the patient. Ratepayers and dependents were automatically covered when hospitalized in a hospital with which the municipality in which they live had signed an agreement or in any hospital if coming under the category of an emergency case away from home or a medically referred case. Resident non-ratepayers could, if they desired, purchase a hospitalization contract from the municipality at a cost ranging from \$10.00 to \$14.00 per year per single person or a whole family, the cost of the contract depending on the classification of the hospital with which the municipality had an agreement.

Coverage under the Maternity Hospitalization Act, the Hospitalization and Treatment Services Act (social welfare recipients—persons and dependents in receipt of assistance under The Old Age Assistance Act, The Mothers Allowance Act, The Supplementary Allowance Act, The Widows Pension Act and The Blind Persons Act and disability pensioners), the Poliomyelitis Sufferers Act and The Cancer Treatment and Prevention Act was available without premium to residents of the province with the exception that social welfare recipients must have been in possession of a hospitalization card issued by the Department of Public Welfare. A resident of the province was a person who has resided in the province for 12 consecutive months out of the 24 months immediately preceding admission to hospital or the spouse of a resident. Non-residents having established an abode in Alberta and becoming ill with poliomyelitis in the province were also eligible for benefits. Persons whose hospitalization was the responsibility of the federal government or the Workmen's Compensation Board were not eligible for benefits under the various Acts.

There were no age restrictions regarding coverage under the provincial-municipal hospitalization plan as, indeed, was the case under most of the other Acts. There were no excluded conditions or waiting periods due to pre-existing conditions. Insured benefits were provided as long as active treatment was required.

The percentage of population covered by provincial plans steadily increased since the inception of the provincial-municipal plan in 1950. As coverage under various Acts were contingent, in the main, on being a resident of the province a participation in the provincial-municipal plan was voluntary, especially for non-ratepayers, 100% coverage of persons living in the province was unlikely.

Of the total patients hospitalized in Alberta approved hospitals during 1957, 74.3% received benefits under one type of provincial program or another. Non-residents, recipients of War Veterans Allowance and Indians hospitalized in Alberta hospitals accounted for 4.7% of total patients leaving 21% not qualified for benefits (see table 24). Hospitalization insurance through Blue Cross and other insurance companies and through employers had an effect on the number of non-ratepayers who did not purchase a hospitalization contract under the provincial-municipal plan.

4. ALBERTA APPROVED HOSPITALS

Approved hospitals in the province were classified into five groups according to their facilities and the services they were capable of providing from the standpoint of physical plant, equipment and medical staff. Group A hospitals comprised the large hospitals in the cities of Edmonton, Calgary, and Lethbridge, the Municipal Hospital and St. Michael's Hospital, Lethbridge having been reclassified to A group effective December 1, 1957. Group B hospitals were mainly located in the small cities. The four Group E hospitals were outpost hospitals and received a special outpost grant of \$1.80 per adult day and \$1.30 per child day. The majority of hospitals fell within C and D group and were mainly located in towns throughout the province. Several group D hospitals were reclassified to C group effective April 1, 1957.

Approved hospitals are active treatment public hospitals which received a per diem allowance on behalf of all residents hospitalized in them. Not included under approved hospitals are "chronic" hospitals, mental hospitals, tuberculosis sanatoria, private hospitals and nursing homes. The hospital statistics presented in this report pertain to approved hospitals only and do not include these latter institutions.

The Mercoal Hospital became an approved hospital municipally owned and operated on July 1, 1957, thereby increasing the total number of approved hospitals in the province to 101. In 1957 these hospitals were distributed among the 5 hospital groups as indicated in the following table:

TABLE 1

NUMBER OF HOSPITALS AND PERCENTAGE DISTRIBUTION OF BED CAPACITY
AND PATIENT DAYS BY HOSPITAL GROUP, 1957

Hospital Group	Number of Hospitals	PERCENTAGE	
		Bed Capacity	Adult and Children Days
A†	6	44.6	48.9
B	9	16.5	13.7
C	44	26.4*	25.1
D	38	11.3	11.1
E	4	1.2	1.2
Total	101**	100.0	100.0

† Two Lethbridge Hospitals classified as A effective December 1, 1957, included with B hospitals.

* Lloydminster not included.

** Hythe sub-hospital of Grande Prairie Municipal Hospital and the isolation hospitals of Edmonton and Calgary are not included as separate hospitals in hospital count.

As at December 31, 1957 these hospitals were owned and operated as follows:

	Hospital	Beds
Municipal	57	2,251*
Municipally owned and Community	5	1,123
Denominational	35	2,649
Industrial	1	12
Service Group	2	162
Provincial	1	827
	101	7,024

* Lloydminster included in municipal hospital count but beds not included.

The Lloydminster Union Hospital, situated just inside the Saskatchewan western border, is partially owned by the Lloydminster Hospital District in Alberta and approximately one-half its patient days are occasioned by Alberta residents. It is included as a municipal hospital.

5. ALBERTA MUNICIPAL HOSPITAL DISTRICTS

As of December 31, 1957, there were 73 municipal hospital districts operating in the province with 57 of them operating their own hospitals, and the remaining 16 functioned under agreement with other hospitals. One new municipal hospital district operating its own hospital was created during the year (Mercoal).

During 1957 the municipal hospital districts of the province provided a comprehensive hospitalization service for their residents under the Provincial-Municipal Hospitalization Plan.

Under the Plan, the hospital district obtained its funds by requisition on the municipal units comprising the district. Where it operated a hospital, a district requisitioned the contributing municipalities for operating and capital cost. A hospital district which did not own its own hospital requisitioned its contributing municipalities for funds to pay denominational or other hospitals the agreed rate for hospitalizing its ratepayers and contract holders.

6. FINANCING HOSPITALIZATION

(A) *Operating Costs*

Under the various provincial plans, with the exception of the provincial-municipal plan, the province paid from general revenue at rates set by the Department designed to cover the cost of services provided for by the Acts. These payments were made direct to hospitals on a patient day basis. The amounts paid under each Act and through per diem and extra per diem allowances and a per case payment for maternity cases appear in the tables which are part of this report.

The hospital rates set by the Department were governed by the cost experience of hospitals by groups. With hospitals grouped from "A" representing large city hospitals to "E" representing small out-post hospitals, averages were struck for each group. An increase of \$1.00 per patient day for all classifications of hospitals was granted effective July 1, 1957. To the extent that a hospital operated at less than the patient day rate paid, plus room differential and other offset revenue, the hospital was allowed to keep the surplus. To the extent that a hospital's expenditures exceeded all sources of revenue, the deficit incurred was borne by the owners of the hospital. To secure funds by tax requisition to meet its obligations, including operating its hospital and paying for hospitalization of its ratepayers and contract holders in other hospitals, the hospital districts submitted operating and capital budgets requiring the approval of the Board of Public Utility Commissioners. Depreciation was not included in operating costs and therefore not covered by the rates set.

Payments by the province to Alberta hospitals were made only to "approved" hospitals which meant a hospital qualified to receive a per diem allowance under The Hospitals Act from the Department of Public Health.

There are 11 general hospitals and 1 mental hospital operating schools of nursing. In addition to patient day payments, a \$300.00 grant per nurse graduated was paid by the province to the hospitals operating the schools of nursing.

The patient was required to pay a co-insurance charge ranging from \$1.50 to \$2.00 per patient day for hospitalization under the provincial-municipal plan and to pay room differential for private or semi-private room. Social welfare recipients, maternity patients and poliomyelitis patients after fourteen days did not pay co-insurance as this was included in the rates paid by the province. A daily rate for newborns was not paid.

Provincial-Municipal Hospitalization

As the term indicates, the provincial-municipal plan was financed jointly by the province and municipalities. Municipal hospital districts or municipalities owning hospitals operated the hospitals and received payment from the province of 60% of the hospital rate set to cover operating costs excluding per diem allowance paid solely by the province. The municipal portion is 40%. The revenue received from the sale of hospitalization con-

tracts ranging from \$10.00 to \$14.00 per person or per family remained with the hospital district or municipality. In those areas where hospitalization needs were provided by Sister or other non-municipal hospitals, the municipality agreed to pay the rate set by the Department for the hospital and the municipality received a 60% refund of payments made for hospitalization of its ratepayers and contract holders. (See Table 11.)

The following table shows the net payments to hospitals and the percentage distribution of costs according to responsible parties under the Provincial-Municipal Hospitalization Program as at December 31, 1957.

TABLE 2
DAILY RATES FOR STANDARD WARD CARE AND SPECIAL HOSPITAL SERVICES, 1957

Hospital Groups	Payment by Patient		Payment by Municipality		Payment by Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%
A	\$2.00	13.5	\$4.50	30.5	\$8.25	56.0	\$14.75	100.0
B	1.80	14.3	3.72	29.5	7.08	56.2	12.60	100.0
C	1.60	14.3	3.24	28.9	6.36	56.8	11.20	100.0
D	1.50	13.9	3.12	28.9	6.18	57.2	10.80	100.0
E	1.30	11.3	2.76	24.0	7.44	64.7	11.50	100.0

* Payments for children under 16 years of age were \$1.00 less.

Maternity Hospitalization

Under the Maternity Hospitalization Program, standard ward accommodation was provided for any mother who was a resident of Alberta and for her infant up to a maximum of twelve days for any one confinement. Alberta approved hospitals were paid by the provincial government at the following rates, including payment for newborn of per diem allowance (\$1.00) and extra per diem allowance (50c), varying according to the class of hospital as is shown in the table below:

TABLE 3
DAILY RATES FOR MATERNITY CARE, DECEMBER 31, 1957

Hospital Group	Basic Rate	DAILY RATE		Total	Plus Per Case Payment
		Plus Allowance Mother	Plus Allowance Newborn		
A	\$9.25	\$1.50	\$1.50	\$12.25	\$35.00
B	7.90	1.50	1.50	10.90	25.00
C	7.30	1.50	1.50	10.30	21.00
D	7.30	1.50	1.50	10.30	17.00
E	8.80*	1.50	1.50	11.80	13.00

* Including Outpost Grant.

Grant of \$40.00 was paid to any woman resident who was confined in her own home, amounting to \$9,120.00 on behalf of 228 claims in 1957.

Social Service Recipients' Hospitalization

During 1957, as during 1956, persons eligible under the program of health care for Social Service Recipients received complete hospitalization care at government expense with very few exceptions. The Daily Hospitalization payments under this

program, including the \$1.50 per day paid in per diem grants, at December 31, 1957 were as follows:

TABLE 4
DAILY RATES FOR HOSPITALIZATION OF SOCIAL SERVICE RECIPIENTS
DECEMBER 31, 1957

Hospital Group	First 20 Days	Subsequent to 20th Day
A	\$14.25	\$10.75
B	11.95	9.40
C	11.15	8.80
D	10.95	8.80
E	12.05*	10.30*

* Includes Outpost Grant of \$1.80 per day.

The provincial expenditures for hospitalization on behalf of this group during 1957 was \$2,834,488.05 including per diem grant for an average of 36,620 recipients during the year.

Poliomyelitis Hospitalization

The amount paid to hospitals for the care of poliomyelitis patients during 1957 amounted to \$467,914.50 including appliances and outpatient services. The rates applicable December 31, 1957 were as follows:

TABLE 5
DAILY RATES FOR POLIOMYELITIS CARE, AS OF DECEMBER 31, 1957

Hospital Group	Isolation Period (1st 14 days in hospital) Daily Provincial Payment				Patient Pays Per Day	Post Isolation Period Daily Provincial Payment	
	Patient Paid Per Day	Ordinary Bed Care	Tracheotomy Cases*	All Respirator Cases		Ordinary Care*	Extra Payment For Respirators
A	\$2.00	\$12.25	\$31.00	\$41.00	....	\$12.25	\$15.00
B	1.80	10.30	31.00	41.00	....	10.30	15.00
C	1.60	9.10	31.00	41.00	....	9.10	15.00
D	1.50	8.80	31.00	41.00	....	8.80	15.00
E	1.30	7.90	31.00	41.00	....	7.90	15.00

* Including per diem allowance of \$1.00 per patient day.

The vast majority of polio patients in 1957 were treated in hospitals at Edmonton, Calgary and Banff.

Summary of Provincial Expenditure

Total expenditure by the province for various hospitalization programs during the calendar year 1957 (mental, tuberculosis and cancer expenditure excluded) amounted to \$14,720,873.65, an increase of \$743,955.99 over the preceding year or a rise of 5.3%.

The Provincial-Municipal Hospitalization Plan absorbed 98.5% of the increase; the total expenditure on the Plan increased by 16.3% as compared to 1956.

The amount spent per capita of population was \$12.69 in 1957 as compared to \$12.44 in 1956. The increased payments per capita each successive year are attributed to higher rates paid to hospitals per patient day, increased participation by municipalities in the Provincial-Municipal Hospitalization Plan coupled with a 10% increase in the refund to municipalities, and an increase in total days.

TABLE 6

BREAK-DOWN OF PROVINCIAL EXPENDITURES ON HOSPITALIZATION SERVICES,
1956 AND 1957

Hospitalization Programs

	1956	1957
Provincial-Municipal Hospitalization	\$ 4,480,968.34	\$ 5,213,401.41
Maternity Hospitalization	2,663,653.30	2,766,481.05
Pension Groups Hospitalization	2,325,017.90	2,453,089.05
Poliomyelitis Hospitalization (excluding medical services)	539,353.74	467,914.50
Per Diem Grant	2,020,814.40	2,078,120.80
Extra Per Diem Grant	769,970.00	806,028.40
Orthopaedic Hospitalization	48,139.20	42,254.00
Psychiatric Hospitalization (in General Hospitals)	65,359.00	64,925.00
Outpost Hospitalization	19,317.40	25,020.10
Maternity (Confinement at Home)	9,280.00	9,120.00
Nurses Education Program	146,100.00	121,600.00
Hospital Construction Grants† (Fiscal Year 1957-58)	888,944.38	672,919.34
Sub Total	\$13,976,917.66	\$14,720,873.65
Mental Hospitalization*	5,716,948.08	6,528,544.74
Tuberculosis Hospitalization*	1,672,037.83	1,797,609.79
Cancer Hospitalization*	52,661.50	60,211.85
Grand Total	\$21,418,565.07	\$23,107,240.03

† Not a payment on hospital operating costs but included in provincial payments. This does not include the federal government share of construction grants paid by the province.

* These items are not administered through the Hospitals Division and will not appear further in the Hospitals Division report. Particulars regarding these services will appear in the Department of Public Health report under the respective Divisions.

(B) Capital Costs

Capital costs apart from construction or equipment grants have been considered the responsibility of the municipalities. Municipalities owning their own hospitals were responsible for repayment of debenture principle, debenture interest and purchase of major depreciable equipment. Provision was made whereby municipalities could enter into an agreement to pay any hospital not owned by the respective municipalities a patient day depreciation charge for each patient from the municipality. Depreciation agreements were also on a voluntary basis and some municipalities were slow to sign an agreement with denominational hospitals. Over the past 3 years the majority of non-municipal hospitals managed to secure a depreciation agreement with the applicable municipalities or hospital districts. However, the formula set for computing the payment to be made by municipalities and districts resulted in payments, the aggregate of which did not meet capital costs.

7. Location and Construction of Hospitals

At a meeting of representatives of The Alberta College of Physicians and Surgeons and the Hospitals Division strategic location of hospitals was discussed. Co-operation and agreement of the College was sought to ensure the availability of medical care in terms of quality and quantity in the various areas throughout the province. The Division is highly appreciative of the College's interest and co-operation in this and other facets of hospitalization.

Agreement was reached at the meeting that a system of regionalization of hospitals is desirable. The small "C", "D" and "E" hospitals in rural areas of a region would be satellites of the regional hospital represented in the main by the present "B" hospitals. These would be larger hospitals in more densely populated areas having more adequate facilities and larger medical

staff. The "A" hospitals in the cities would be base hospitals. The satellite hospitals on the periphery of a regional hospital is encouraged to refer patients requiring treatment or facilities beyond the scope of the small hospital to the regional hospital, provided the services required can be performed in the regional hospital, rather than by-pass it in favor of a base hospital. While regionalization of hospitals to an extent is in effect it has not been stressed. It is planned that more consideration be given to this concept in the future to avoid duplication of facilities as much as possible and from an economic standpoint, to encourage hospitalization as near the patient's home as is compatible with the nature of services required. It is further planned that construction of hospitals in areas not requiring a minimum of twenty-five beds would not be approved.

A survey of the active treatment hospitalization facilities available in the City of Edmonton was made by the Hospitals Division on request of the City Council.

The following hospital additions were completed during the calendar year 1957, a total net increase in active treatment bed capacity of 327 beds and 29 bassinets:

TABLE 7
INCREASES IN HOSPITAL BED AND BASSINET CAPACITY, 1957
(excluding mental and T.B. Beds)

	Beds	Bassinets
Olds	10	9
Innisfail	1	....
Tofield	11	9
Didsbury	9	11
Edmonton, University	269	....
Total	300	29

During the 1957-1958 fiscal year a total of \$672,919.34 (excluding the federal share) was expended by the province on construction grants. The comparable figure for 1956-1957 was \$888,944.38.

As at December 31, 1957 there were 7,202 active treatment beds and cribs in approved hospitals excluding mental and chronic hospitals and tuberculosis sanatoria. This figure includes 178 beds in the University Hospital, Edmonton, which had become available but were not in use and, therefore, were not included in the tables (see tables 30 and 31). The average number of active treatment beds per 1,000 population at the end of the year was 6.21.

The hospital construction projects which were commenced during the 1957-1958 fiscal year were the following:

TABLE 8
ADDITIONS TO HOSPITAL BEDS AND BASSINET CAPACITY UNDER CONSTRUCTION
(Excluding Mental and T.B. Beds)

	Net Increase in Beds	Net Increase in Bassinets
Bow Island Municipal	20	8
Calgary General	81	....
Cardston Municipal	14	8
Cold Lake, John Neil	12	8
Drayton Valley Municipal	20	8
Edmonton Royal Alexandra East Wing....	12	....
Grande Prairie Municipal	32	....
MacLeod Municipal	18	11
Total	209	43

Utilization of Hospital Beds in Alberta

It has been assumed in some quarters that when a dominion-provincial hospitalization plan becomes operative, it will be inevitable that there will be a greatly increased demand for hospital services and beds. In spite of steadily increasing hospitalization insurance of various kinds in Alberta over the past eleven years, the amount of hospitalization per capita in Alberta has remained remarkably steady, the total days of care given per 1,000 population in 1947 being 1,710 days as compared to 1,714 days in 1957—reference Table 16. With only 21% of resident patients hospitalized during 1957 not qualified for hospitalization benefits including persons insured through Blue Cross, other insurance companies and through employers, it is not anticipated that the incidence of hospitalization will increase unduly immediately a new plan offering wider coverage comes into effect.

The hospitalization plans are intended to provide insured services to active treatment cases only. A reporting and checking procedure is in effect whereby grants are discontinued on all cases deemed by the Department to be no longer in need of active treatment care. None the less, there are some long term cases in general hospitals which could be more adequately cared for in convalescent or rehabilitation hospitals or adequately and more economically cared for in nursing homes if such accommodation was available. Table 20 indicates the distribution of cases and patient days by age and length of stay in hospital.

9. MOVEMENT OF PATIENTS

Volume of Hospital Care

There were 233,418 adult and children patients hospitalized in the approved hospitals of the province during 1957, including D.V.A. Division of the University Hospital, of whom 40.6% were male patients and 59.4% were female patients. These patients spent 1,988,897 days in hospital. Compared with the previous year, there were more patients under care (5.4%) and more hospital days (3.6%) whereas the population increased 3.3%.

The number of births in the approved hospitals of the province amounted to 34,372 in 1957, an increase of 787 births over 1956. Newborns under care in approved hospitals amounted to 34,965 in 1957, totalling 260,958 days. It is noteworthy that 96.4% of births took place in approved hospitals. Stillbirths in approved hospitals remain approximately the same in number, 389 for 1956 compared to 386 in 1957. For live births July has been the high month and February the low month for the last four years 1954 to 1957. Data on hospital days and cases under care are given in table 15.

In 1957 the average length of stay for adults and children has dropped for the first time since 1953, to 8.7 days. For newborns, the average length of stay continued its decline from 9.7 days in 1947 to 7.6 days in 1957. Incidence of hospitalization per 1,000 population for the years 1947 to 1957 are given in Table 16. Of every 1,000 population, 197 were admitted to an approved hospital in 1957, a fairly static situation for the past 5 years.

Monthly Movement of Patients

Tables 17 and 18 as well as Diagrams IV and V show the monthly movement of patients and the related hospital days in 1957. A study of these tables and diagrams reveals a strong fluctuation in the monthly movement of patients and their related hospital days.

In 1957 the pattern of monthly admissions of adults and children patients differed from the pattern of monthly admissions for the previous three years. Whereas for the three previous years March had been the high month for adults and children admissions and September the low month, in 1957 October was the high month and February the low month. However, more hospital days were claimed for March than any other month. This is true for most hospital groups, the exceptions being group D hospitals and the four outpost E hospitals.

An increase in adults and children deaths was recorded in 1957 as compared to 1956. Total deaths in approved hospitals amounted to 3,684 which is 172 deaths more than in 1956, or an increase of 4.9%. The percentage of all provincial deaths occurring in approved hospitals was 44.8 including newborns, 39.6 excluding newborns.

Cases and Days by Length of Stay

Of the 226,747 patients discharged or deceased in 1957, slightly more than four-fifths (80.6%) spent 10 days or less in the provincial approved hospitals, but they only required 45.2% of the total patient days. Patients who stayed in approved hospitals 3 days or less comprised 30.9% of the cases and absorbed 7.4% of the days.

As is shown in Table 19 and Diagram VI, the greater part of the patients (96.9%) were discharged or died within one month of their admission to hospital. Long stay cases, patients who were hospitalized for more than 30 days, amounted to 3.1% but required 23.7% of the days. Patients who stayed 91 or more days in hospital, although they make up less than one-half of one per cent of the total discharged or deceased cases, absorbed 9.0% of the days.

Cases and Days by Age Group and Sex

Tables 20 and 21 show the distribution of cases and days of discharged patients and their related average length of stay by age group and sex. Diagram VII represents the same facts in graphic form.

More than one-third (35.6%) of the cases were between the ages of 20 and 39 and they utilized 29.2% of the bed capacity of the provincial approved hospitals. This was mainly due to the childbearing females, most of whom fall in that age group, and 96.4% of them went to approved hospitals for care in 1957.

Comparing the utilization of hospital services by age group in 1957 to that of 1956 and that of 1951 when figures were first compiled, we note that from 1951 (excluding polio patients) to

1956 there had been a continuous decrease in the proportion of patients of the younger age group and that in 1957, there occurred a slight increase in their number. For older age group patients, the reverse is true.

Table 22 indicates the number of discharged patients and their average length of stay by age group over the past seven years, 1951-1957.

Cases and Days by Hospitalization Benefits

About three-quarters (74.3%) of the total patients hospitalized in Alberta approved hospitals in 1957 received hospitalization benefits under one type of provincial program or another. More than one-half (52.1%) of the total patients received benefits under the Provincial-Municipal Hospitalization Plan. Non-residents, boarders and recipients of Veterans' Allowance, together with Indians hospitalized in general approved hospitals, make up 4.7% of the total patients. The balance (21.0%) consists of residents not qualified for benefits under any government sponsored plan (see table 24).

An examination of Table 25 and Diagram VIII reveals the pattern of average length of stay for the various types of patients. A pronounced trend is noted in the length of stay of maternity patients which has declined steadily from 8.4 days in 1951 to 7.3 days in 1957.

In considering the days of stay of patients by the hospitalization benefits received (see table 23), we note that 41.7% of the patients who were either responsible for their own accounts or were insured by private companies were discharged within 3 days of their admission to hospital in 1957, a percentage slightly higher than in 1956. Some 37.1% of the patients who received complete hospitalization services under the Provincial-Municipal Hospitalization Plan were discharged within the same period of time in 1957. This percentage is slightly lower than in 1956. The percentage of patients discharged as the stay becomes longer tends to even off for both groups. Approximately 97.0% of both groups were discharged within one month of admission to hospital.

Almost all (99.8%) of the maternity cases were discharged within 20 days of their admission to hospital; 94.0% spent from 4 to 10 days only.

10. STANDARD OF SERVICES RENDERED WITHIN HOSPITALS

Within the terms of Hospital Regulations set by the Department, the level of services within individual hospitals has been established according to the wishes of the community it served, the policy of the owners of the hospital and the ability of the hospital to obtain the funds necessary to provide services. Apart from the expected difference in the type of service rendered in the large hospitals with highly specialized departments and the small hospitals, there is a difference in the level of services in hospitals of comparable size.

For the first time a very substantial amount of the federal laboratory and x-ray equipment grant was utilized in supplying equipment to hospitals. In many cases, hospitals received items of equipment they had not previously possessed resulting in an increase in services rendered, whereas many other hospitals improved the facilities they already had.

11. CONSULTING SERVICES

Consulting services involving the operation of a hospital may be instituted to the extent and at such time as it is considered necessary.

Two Inspectors of Hospital Administration were employed by the Division to assist hospitals in administrative matters. A Supervisor of Municipal Hospitals Organizations assists in organizing new districts, and particularly assists members of hospital boards with respect to The Municipal Hospitals Act. The Director of the Division of Medical Services is the medical consultant to the Hospitals Division. The services of two technicians from the X-Ray and Laboratory School have been utilized on a part time basis to visit hospitals as necessary. A departmental dietitian has been available on occasion but her services have not been integrated into the hospital field. In conjunction with the Associated Hospitals of Alberta, consideration is being given to extension of consulting service.

12. SUPERVISION OF ADMINISTRATION OF HOSPITALS

The Hospitals Division maintains a close supervision of administration of hospitals. The Municipal Hospitals Act governs the election of hospital boards of municipal hospitals and the Department establishes the number of members comprising each board. The appointment of secretary-treasurers and auditors must be approved by the department. Hospital accounting schools have been held in the past to instruct secretary-treasurers and accountants in uniform hospital accounting. Through various returns required, minutes of board meetings, information bulletins, comparative cost table and other communications hospitals are given considerable supervision. Two Inspectors of Hospital Administration have been appointed to advise and supervise hospital staff, particularly in the smaller hospitals. Much of the Division staff's time is spent in this area. The executives of the Associated Hospitals of Alberta work closely with the Division in advising association members. The hospitals have been very receptive, co-operative and appreciative.

13. HOSPITAL REGULATIONS

The Hospital Regulations under The Hospitals Act including Fire Prevention Regulations under The Fire Prevention Act will remain in effect after The Hospitalization Benefits Act has been proclaimed until such times as they are rewritten in sections under the new act.

Some work has been done on the institution of uniform hospital by-laws in small hospitals.

14. PRIVATE HOSPITALS

The Private Hospitals Act provides for the licensing and inspection of private hospitals in the province including control of structural alterations or additions, of type of services and operations rendered therein and the nature of records to be kept.

There were 10 private hospitals licensed in the province in 1957 with a total capacity of 184 beds. The license fee is \$5.00. Two of these hospitals have been approved by the department to qualify for payments under The Maternity Hospitalization Act.

15. LONG TERM ACTIVE TREATMENT HOSPITALIZATION AND NURSING HOME CARE

The term "chronic" used in relation to hospitals is not definitive in that, although it indicates services for long-term patients, it does not indicate whether or not active treatment services are available. This is a matter of increasing significance since the federal government has announced its intention to share with provinces the cost of an active treatment hospitalization program.

There were 10 hospitals classified as "chronic" hospitals in the province in 1957 having a total capacity of 699 beds. Some of these beds are in hospitals providing long-term active treatment care to patients who are benefiting therefrom or whose prognosis is such that they may benefit from active treatment services. On the other hand a number of these beds are utilized by patients not being rendered active treatment care. Consideration is being given to establishing a clearer delineation as to the type of services rendered in these institutions.

To date "chronic" hospitals have not been paid any operating grants under any of the provincial plans operated by this department whether the service provided is active treatment convalescent or rehabilitation care, nursing care, or of a domiciliary type of care. Municipalities and the Associated Hospitals of Alberta have submitted resolutions to include services rendered in the "chronic" hospitals as insured services under the provincial plan, and consideration is being given to this end.

DIAGRAM No. 1

PROVINCIAL GRANTS & PAYMENTS FOR HOSPITALIZATION IN GENERAL HOSPITALS, 1951 - 1957

(PAYMENTS TO MENTAL HOSPITALS AND T.B. SANATORIA, AND PAYMENTS BY THE CANCER DIVISION ARE EXCLUDED).

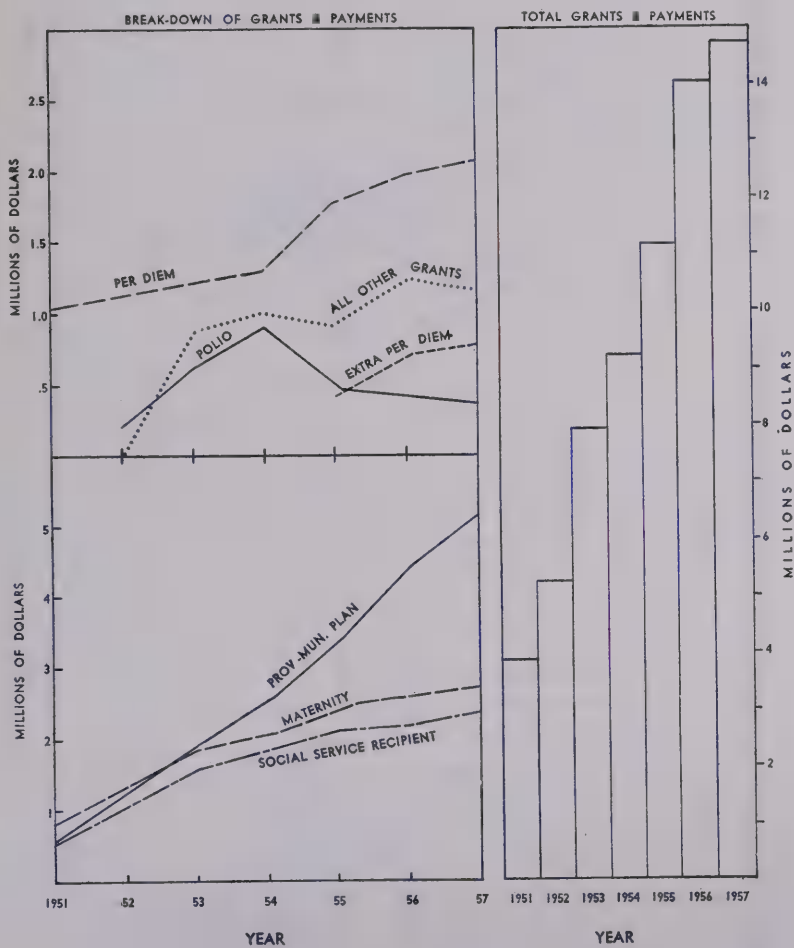


DIAGRAM No. II

DISTRIBUTION OF OPERATING EXPENDITURES BY MAJOR TYPE OF EXPENDITURE 1956 - 1957

(EXCLUDING DEPRECIATION AND CAPITAL INTEREST).

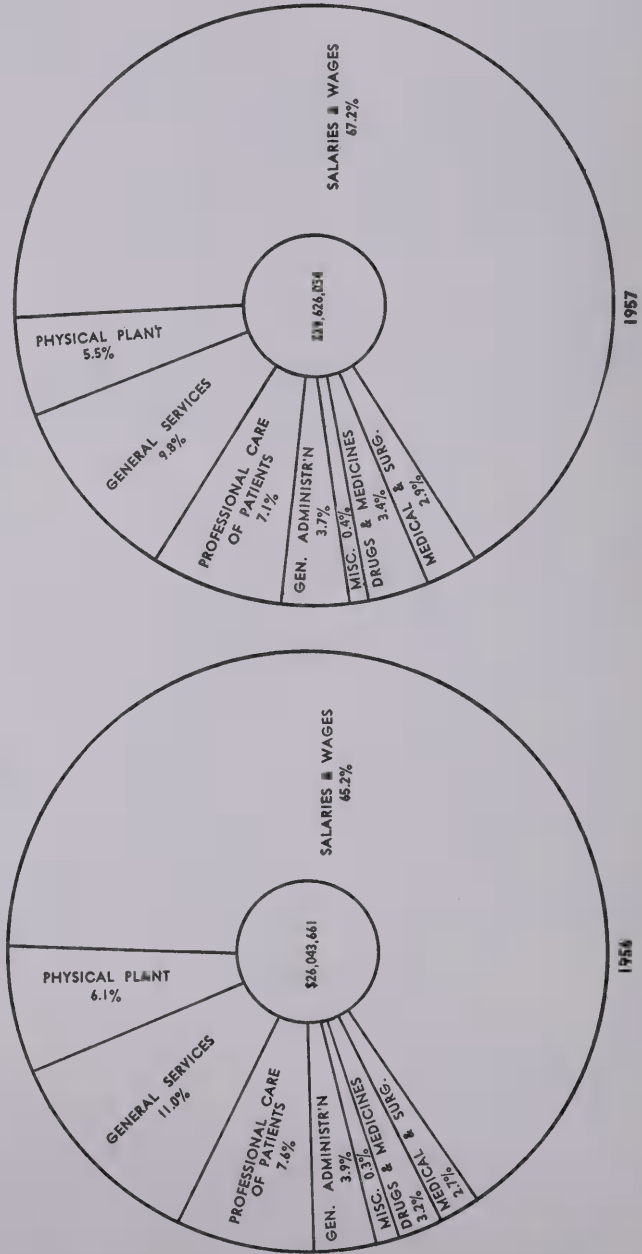


DIAGRAM No. III

PATIENTS AND PATIENT DAYS IN RELATION TO BED AND CRIB CAPACITY AND HOSPITAL STAFF **1947 - 1957**

(EXCLUDING NEWBORN AND BASSINETS)

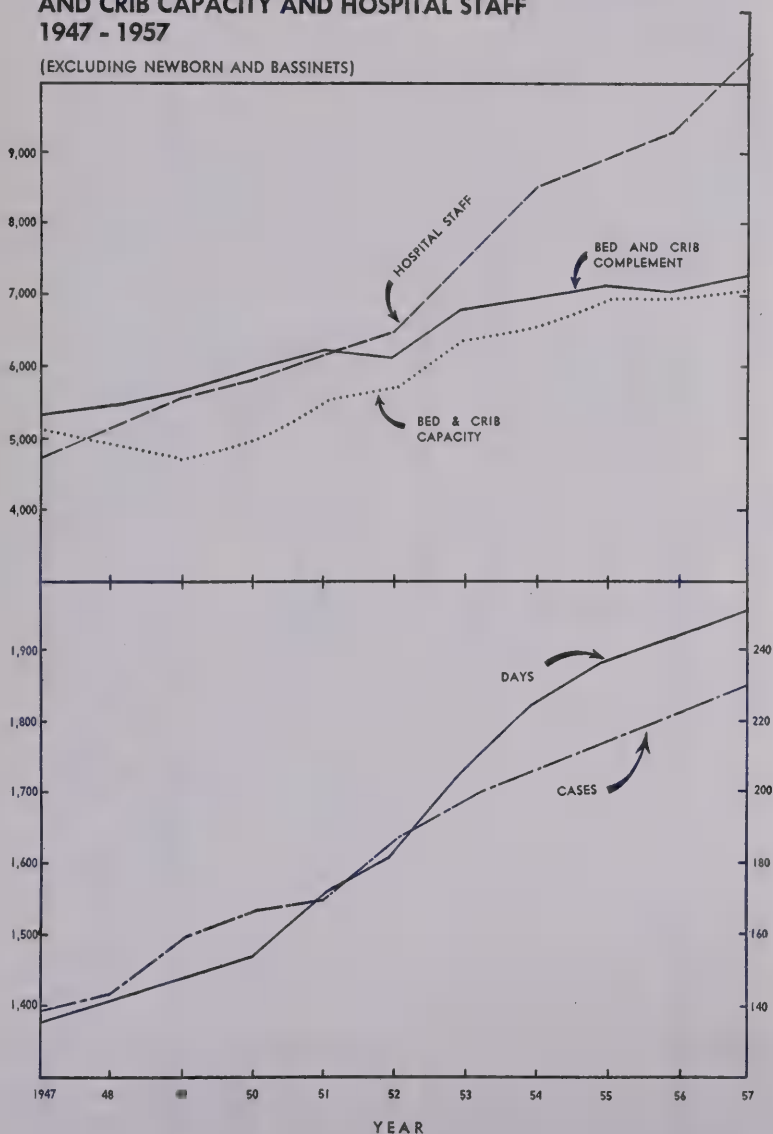


DIAGRAM No. IV

**MONTHLY ADMISSIONS OF ADULTS & CHILDREN
1953 - 1957**

(EXCLUDING NEWBORN)

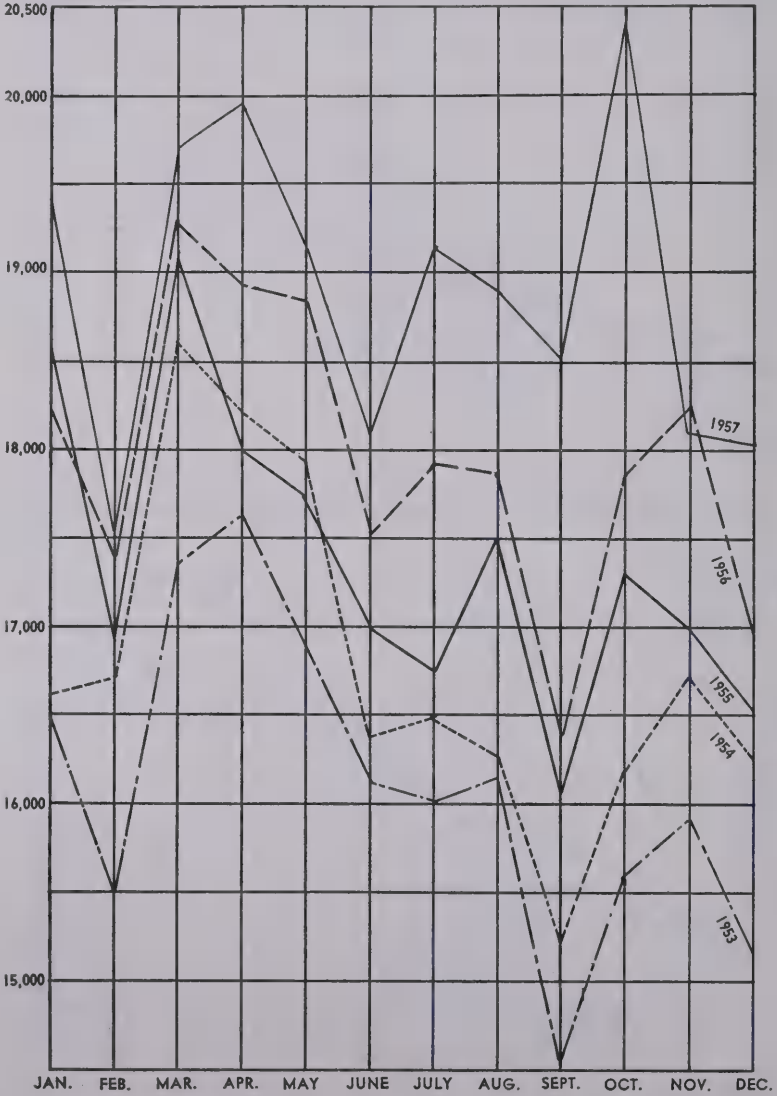
NO. OF
ADMISSIONS

DIAGRAM No. V

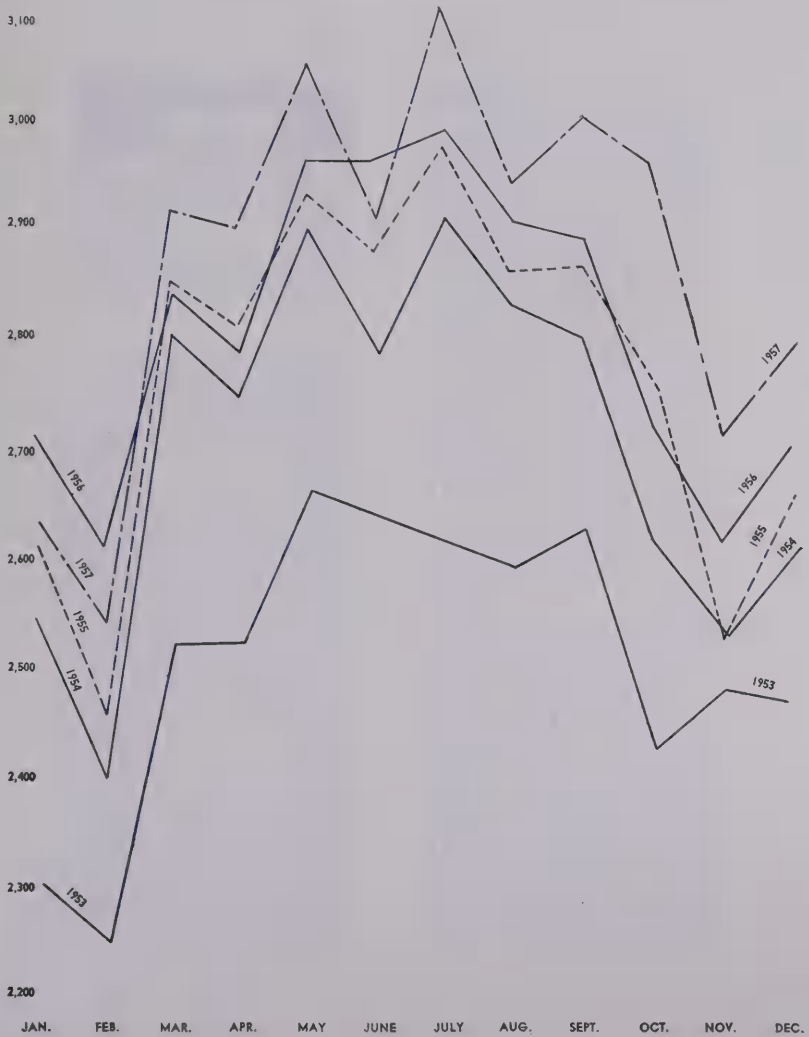
MONTHLY LIVE BIRTHS 1953 - 1957

DIAGRAM No. VI

DISTRIBUTION OF CASES AND PATIENT DAYS BY LENGTH OF STAY 1957

(EXCLUDING NEWBORN, AND D.V.A. DIVISION, UNIVERSITY HOSPITAL).

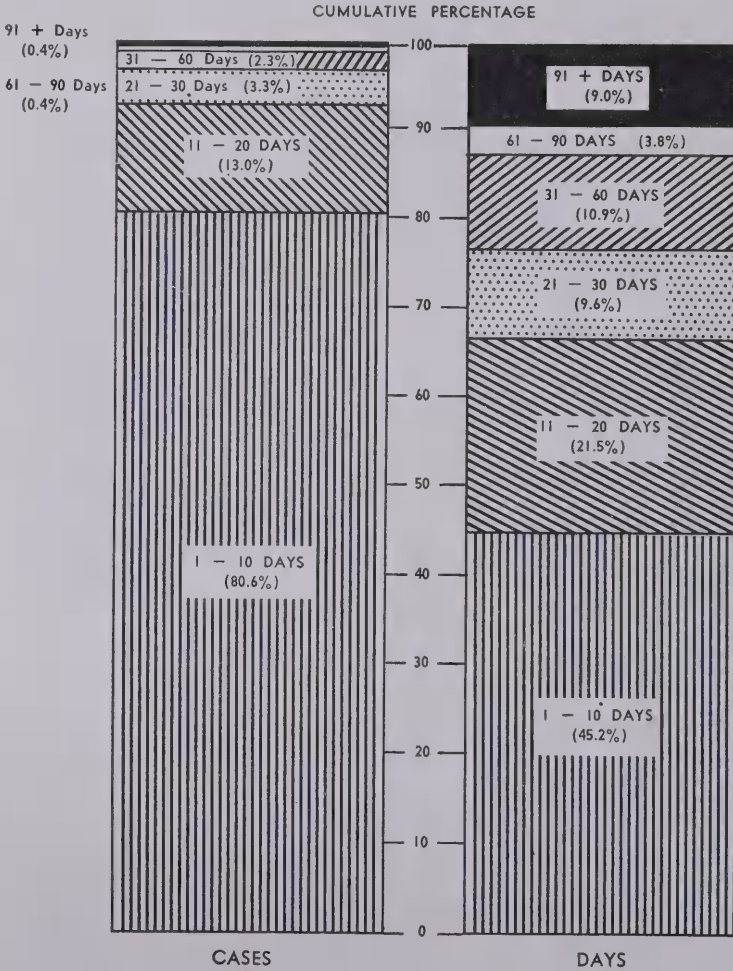


DIAGRAM No. VII
DISTRIBUTION OF CASES AND PATIENT DAYS BY AGE GROUP, 1957
 (EXCLUDING NEWBORN, AND D.V.A. DIVISION, UNIVERSITY HOSPITAL).

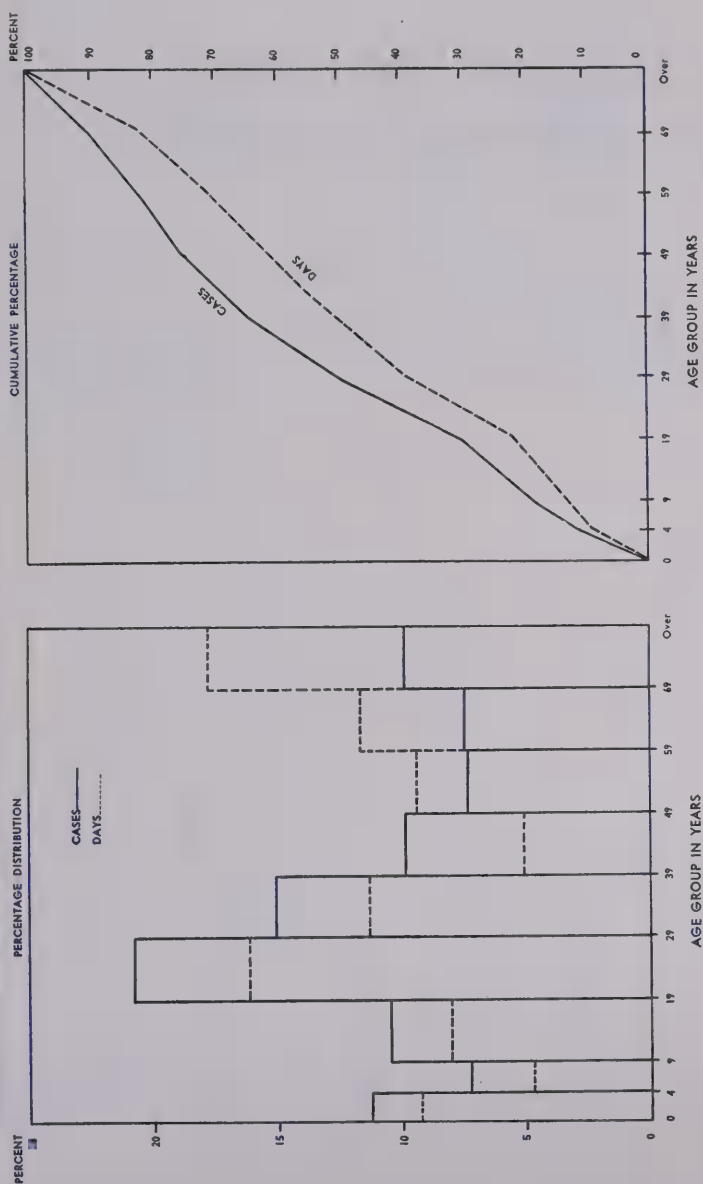


DIAGRAM No. VIII

AVERAGE LENGTH OF STAY IN HOSPITAL BY TYPE OF BENEFIT, 1957

(EXCLUDING NEWBORN, AND D.V.A. DIVISION, UNIVERSITY HOSPITAL).

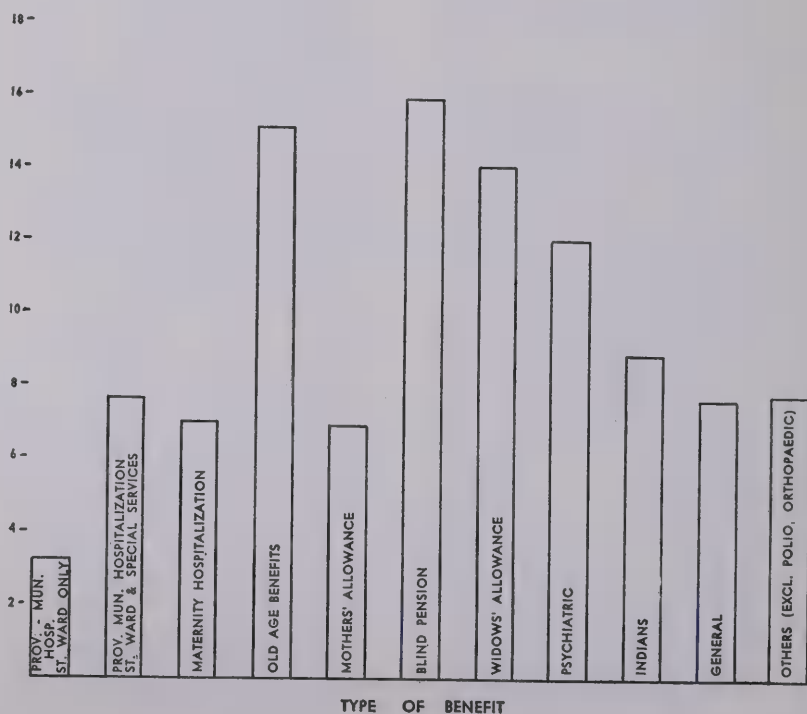


TABLE 9
FINANCIAL OPERATIONS OF APPROVED HOSPITALS, 1951-1957

	1951	1952	1953	1954	1955*	1956	1957	% Increase over 1956
Total Revenue for operating purposes (\$1,000's)	14,677	17,340	21,472	24,029	25,024	26,446	28,523	7.8
Total Expenditures (\$1,000's):								
Excluding Depreciation and Capital Interest	.....	.....	.....	.....	24,005	26,044	29,626	13.7
Including Depreciation and Capital Interest	15,061	17,188	20,947	24,016	26,071	28,685	32,261	12.4
Total Cost of Salaries and Wages	7,486	9,032	11,432	13,779	14,986	16,986	19,907	17.2
Revenue per patient day†	9.04	10.29	11.84	12.57	12.69	13.18	13.74	4.2
Expenditure per patient day†								
Excluding Depreciation and Capital Interest	.....	.....	.....	.....	12.17	12.98	14.27	9.9
Including Depreciation and Capital Interest	9.27	10.20	11.55	12.56	13.22	14.30	15.54	8.6

* 1955 represents the first year that standardized accounting procedures were effective through most of the approved hospitals in the province, hence, while comparisons may be made with previous years, they can only be approximate since the figures shown under previous years would likely be different if these new procedures existed previously.

† Adult and Children plus $\frac{1}{2}$ newborn.

TABLE 10 — GRANTS AND PAYMENTS TO APPROVED HOSPITALS—1957

APPROVED HOSPITALS	PER DIEM GRANT		EXTRA PER DIEM GRANT		MATERNITY BENEFITS				PENSION BENEFITS				
	Grant	Days	Amount	Days	Amount	Days	Amount	Cases Discharged	Amount	Total Amount	Days	Amount	Total Payment
Athabasca, Municipal	12,369	12,369	00	10,637	5,318.50	1,377	9,383.10	188	3,948.00	13,331.10	2,310	20,542.80	51,561.40
Banff, Mineral Springs	9,165	9,165	00	4,905	2,452.50	749	5,123.70	101	2,121.00	7,244.70	535	4,343.50	23,205.70
Barhead, St. Joseph's	17,023	17,023	00	15,933	7,966.50	1,389	9,510.70	188	3,948.00	13,458.70	5,095	42,879.95	81,328.15
Bassano, Municipal	6,648	6,648	00	6,009	3,004.50	587	3,946.10	57	969.00	4,915.10	4,321	3,629.70	18,197.30
Beaverlodge, Municipal	5,291	5,291	00	4,916	2,458.00	737	4,979.10	114	1,938.00	6,917.10	691	5,973.30	20,639.40
Bentley, Municipal	3,498	3,498	00	3,307	1,653.50	360	2,522.10	45	945.00	3,467.10	572	4,864.10	13,482.70
Berwyn, Municipal	3,914	3,914	00	3,456	1,728.00	575	3,916.50	75	1,275.00	5,191.50	305	2,540.75	13,374.25
Blairmore, Crows Nest Pass Municipal	11,751	11,751	00	10,316	5,158.00	954	6,462.20	151	3,171.00	9,633.20	2,538	21,457.45	47,999.65
Bonnyville, Katherine H. Prittle	2,910	2,910	00	2,149	1,074.50	261	1,777.30	36	612.00	2,389.30	660	5,516.00	11,889.80
Bonnyville, St. Louis	9,324	9,324	00	8,229	4,114.50	1,092	7,359.60	137	2,877.00	10,236.60	2,339	20,606.10	44,281.20
Brooks, Municipal	15,227	15,227	00	13,898	6,949.00	1,690	11,506.00	232	4,872.00	16,378.00	1,382	12,077.50	50,631.50
Calgary, Alberta Red Cross	27,733	27,733	00	166,515	83,257.50	25,604	223,683.00	4,339	151,848.00	375,511.00	19,231	214,460.00	69,987.00
Calgary, General	216,015	216,015	00	88,928	42,964.00	14,405	125,791.25	2,188	76,580.00	202,371.25	8,927	100,141.25	460,497.50
Calgary, Holy Cross	115,021	115,021	00	6,446	3,223.00	3,065	20,721.50	382	8,022.00	28,743.50	.....	.....	38,499.50
Calgary, Salvation Army Grace	6,533	6,533	00	26,160	13,080.00	3,710	27,403.00	434	10,850.00	38,253.00	4,305	39,744.05	121,522.05
Camrose, St. Mary's	30,445	30,445	00	1,681	840.50	355	2,397.50	43	731.00	3,128.50	997	7,547.90	14,731.90
Canmore, Canmore	3,215	3,215	00	7,920	3,910.00	1,154	7,874.20	186	3,162.00	11,036.20	1,170	9,826.15	32,926.35
Cardston, Municipal	8,154	8,154	00	2,412	1,206.00	83	561.90	11	187.00	748.90	388	3,160.65	7,777.55
Cardmangay, Little Bow Municipal	2,662	2,662	00	7,032	3,516.00	727	4,953.10	88	1,848.00	6,801.10	989	8,875.60	27,359.70
Castor, Our Lady of the Rosary	8,167	8,167	00	1,656	828.00	152	1,019.60	24	408.00	1,427.60	585	4,952.40	9,042.00
Cereal, Municipal	1,834	1,834	00	9,092	4,546.00	1,292	6,638.60	172	3,612.00	12,262.60	866	7,023.70	34,849.30
Clareholm, Municipal	11,017	11,017	00	5,429	2,714.50	656	4,379.80	87	1,479.00	5,858.80	949	7,479.60	22,000.90
Coaldale, Community	5,948	5,948	00	3,209	1,604.50	656	4,297.00	102	1,326.00	5,623.00	485	4,014.00	15,290.50
Cold Lake, John Neil	4,049	4,049	00	3,774	1,887.00	555	3,753.50	67	1,139.00	4,892.50	610	5,063.55	15,819.05
Consort, Municipal	3,976	3,976	00	5,660	2,830.00	591	3,989.30	68	1,156.00	5,145.30	539	4,794.60	18,621.90
Coronation, Municipal	5,852	5,852	00	7,210	3,605.00	580	3,769.00	65	1,105.00	4,904.00	776	6,672.20	23,076.20
Daysland, Providence	7,895	7,895	00	2,008	100.00	92	610.60	11	187.00	797.60	34	296.30	1,682.70
Desmarais, St. Martin's	4,489	4,489	00	1,708	854.00	184	1,263.20	23	391.00	1,654.20	48	412.60	5,348.80
Devon, Civic	2,428	2,428	00	8,621	4,310.50	976	6,718.80	129	2,709.00	9,427.80	1,055	8,974.85	32,117.15
Didsbury, Municipal	9,404	9,404	00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Drumheller, Municipal	22,344	22,344.00	19,705	9,852.50	2,005	14,792.50	281	7,025.00	21,817.50	3,453	30,510.75	84,515.75
Eckville, Municipal	6,170	6,170.00	5,746	2,873.00	1,520	3,569.00	67	1,407.00	4,976.00	.....	10,329.60	24,348.60
Edmonton, Beulah Home	3,502	3,502.00	3,299	1,649.50	1,182	8,027.60	104	1,768.00	9,785.60	.....	171,835.75	14,947.10
Edmonton, General	133,404	133,404.00	96,324	48,162.00	14,888	130,361.00	2,007	70,263.00	200,606.00	14,247	158,724.25	553,507.75
Edmonton, Misericordia	122,372	122,372.00	91,909	45,354.50	13,802	120,884.50	1,994	69,790.00	190,674.50	14,247	158,724.25	517,725.25
Edmonton, Royal Alexandra	220,379	220,379.00	166,503	83,251.50	25,175	307,752.75	4,870	170,450.00	478,202.75	22,669	245,623.75	1,027,457.00
Edmonton, University	193,202	193,202.00	104,315	52,168.50	13,369	122,833.50	1,700	59,535.00	181,965.75	18,941	208,038.25	635,374.90
Edson, St. John's	10,147	10,147.00	7,143	3,066.50	1,268	5,089.50	1,268	5,649.00	9,135.10	1,105	9,730.70	42,932.30
Elk Point, Municipal	15,693	15,693.00	11,818	7,090.50	1,952	14,688.60	127	2,667.00	9,165.60	2,917	25,639.10	57,588.20
Elmora, Municipal	3,169	3,169.00	3,108	1,554.00	399	2,709.70	41	697.00	3,406.70	725	5,930.05	14,059.75
Empress, Municipal	3,132	3,132.00	2,849	1,424.50	530	3,627.00	55	935.00	4,562.00	263	2,030.15	11,148.65
Fairview, Municipal	11,756	11,756.00	10,460	5,230.00	1,278	8,679.40	160	3,360.00	12,039.40	1,432	12,296.45	41,321.85
Fort Macleod, Municipal	7,046	7,046.00	6,059	3,029.50	736	5,007.80	97	1,649.00	6,656.80	839	6,833.30	23,565.60
Fort McMurray, St. Gabriel's	3,157	3,157.00	1,173	586.50	325	2,133.00	41	533.00	2,666.00	515	4,051.50	10,461.00
Fort Smith, General	1,104	1,104.00	170	85.00	50	333.00	7	119.00	452.00	63	406.35	2,047.35
Fort Vermilion, St. Theresa	4,651	4,651.00	3,736	1,868.00	483	3,117.00	62	806.00	3,923.00	387	3,151.50	13,593.50
Galahad, St. Joseph's	9,303	9,303.00	8,348	4,174.00	621	4,172.30	62	1,302.00	5,474.30	623	5,199.85	24,151.15
Glendon, Municipal	3,758	3,758.00	3,661	1,830.50	398	2,675.40	52	844.00	3,559.40	864	7,651.20	16,799.10
Grande Prairie, Municipal	24,418	24,418.00	20,833	10,416.50	3,101	21,053.30	509	10,689.00	31,742.30	3,914	32,880.00	99,456.80
Grande Prairie, Hythe Sub Municipal	1,445	1,445.00	1,268	639.00	190	1,283.00	27	459.00	1,742.00	257	2,259.45	6,085.45
Hanna, Municipal	13,817	13,817.00	12,775	6,387.50	1,585	10,739.50	183	3,843.00	14,582.50	2,111	18,113.55	52,900.55
Hardisty, St. Anne's	7,276	7,276.00	6,405	3,202.50	585	3,584.50	51	867.00	4,451.50	1,007	8,627.20	23,557.20
High Prairie, Providence	16,997	16,997.00	11,563	5,781.50	1,913	13,013.90	297	5,049.00	18,062.90	1,266	11,058.15	51,899.55
High River, Municipal	14,744	14,744.00	13,742	6,871.00	1,635	11,146.50	234	3,978.00	15,124.50	1,889	15,770.35	52,509.85
Innisfail, Municipal	9,316	9,316.00	8,311	4,155.50	1,148	7,788.40	171	3,591.00	11,379.40	1,476	12,748.75	37,599.65
Islay, Municipal	3,393	3,393.00	3,340	1,870.00	70	482.00	8	136.00	618.00	608	5,209.30	10,890.30
Jasper, Seton	5,597	5,597.00	2,595	1,297.50	1,059	7,198.70	123	2,091.00	9,289.70	169	1,508.75	17,652.95
Killam, General	9,185	9,185.00	8,147	4,073.50	1,051	7,168.30	105	1,853.00	9,021.30	1,711	9,433.50	31,423.50
Lac La Biche, St. Catherine's	17,297	17,297.00	13,623	6,811.50	1,520	10,340.30	201	4,270.00	14,561.00	2,694	28,481.00	63,638.50
Lacombe, Municipal	16,668	16,668.00	15,281	7,640.50	2,192	14,907.60	263	5,649.00	20,556.60	1,881	16,793.70	61,658.80
Lamont, Archer Memorial	20,069	20,069.00	17,857	8,928.50	1,033	7,593.70	123	3,075.00	10,658.70	6,558	59,680.65	99,336.85
Lethbridge, Municipal	61,957	61,957.00	50,197	25,098.50	7,051	52,831.25	865	22,365.00	75,196.25	5,409	49,808.50	211,460.25
Lethbridge, St. Michael's	56,171	56,171.00	44,792	22,396.00	3,532	26,572.30	431	11,145.00	37,717.30	6,293	58,471.25	174,755.55
Lloydminster	16,427	16,427.00	14,452	7,628.00	1,555	10,622.50	210	4,410.00	15,032.50	2,152	18,026.05	56,705.55
McLennan, Sacred Heart	20,299	20,299.00	16,033	8,016.50	1,852	12,652.60	236	4,956.00	17,608.60	2,884	25,067.25	70,991.35
Magrath, Municipal	5,181	5,181.00	4,912	2,456.00	418	2,850.40	60	1,020.00	3,870.40	1,082	8,604.05	20,111.45
Manning, Municipal	5,370	5,370.00	5,064	2,532.00	950	3,771.30	108	1,404.00	7,567.70	1,009	8,059.75	23,528.75
Mannville, Municipal	4,345	4,345.00	4,250	2,125.00	561	3,171.30	74	1,258.00	5,029.30	892	7,700.90	19,200.20
Mayethorpe, Municipal	7,993	7,993.00	6,102	3,051.00	1,068	4,394.20	153	2,601.00	9,839.40	1,047	9,503.05	30,386.45
Medicine Hat, Municipal	43,161	43,161.00	35,029	18,014.50	5,468	40,394.20	803	20,075.00	60,469.20	4,832	45,197.95	186,842.65

TABLE 10 — GRANTS AND PAYMENTS TO APPROVED HOSPITALS—1957 (Continued)

APPROVED HOSPITALS	PER DIEM GRANT		EXTRA PER DIEM GRANT		MATERNITY BENEFITS					PENSION BENEFITS		
	Grant Days	Amount	Days	Amount	Days	Amount	Cases Discharged	Amount	Total Amount	Days	Amount	
Mercoal	2,280	2,280.00	1,300	650.00	256	1,709.80	37	629.00	2,338.80	37	349.65	5,618.45
Mundare, General	5,458	5,458.00	4,823	2,413.00	273	1,918.90	29	493.00	2,411.90	1,998	17,533.30	27,816.20
Myrdam, Municipal	4,669	4,669.00	4,395	2,197.50	383	2,958.90	42	710.00	3,312.90	1,631	14,136.65	24,316.05
Olds, Municipal	10,026	10,026.00	8,642	4,321.00	1,359	9,207.70	213	4,473.00	13,680.70	1,305	10,809.20	38,836.90
Oyen, Municipal	3,210	3,210.00	2,989	1,494.50	550	3,738.00	68	1,156.00	4,894.00	174	1,501.65	11,100.15
Peace River, Municipal	15,139	15,139.00	11,720	5,860.00	1,846	12,529.80	222	4,641.00	17,170.80	898	7,739.80	45,909.60
Pincher Creek, St. Vincent's	9,695	9,695.00	8,093	4,046.50	1,159	7,914.70	137	2,877.00	10,791.70	1,232	10,657.60	35,190.80
Ponoka, Municipal	12,153	12,153.00	10,718	5,359.00	1,485	10,210.50	194	4,074.00	14,284.50	1,254	10,918.65	42,715.15
Provost, Municipal	5,605	5,605.00	5,277	2,638.50	652	4,382.60	91	1,911.00	6,293.60	791	6,954.20	21,491.30
Radway, St. Joseph's	5,152	5,152.00	4,363	2,181.50	559	3,827.70	73	1,241.00	5,068.70	975	8,565.75	20,967.95
Raymond, Municipal	4,327	4,327.00	4,057	2,028.50	552	3,769.60	81	1,377.00	5,146.60	535	4,544.50	16,046.60
Red Deer, Municipal	34,253	34,253.00	28,379	14,189.50	5,268	38,998.20	727	18,175.00	57,173.20	3,790	35,623.55	141,239.25
Rimbey, Municipal	10,649	10,649.00	7,612	3,806.00	1,389	9,490.70	211	4,431.00	13,921.70	1,658	14,292.50	42,669.20
Rocky Mountain House, Municipal	8,018	8,018.00	6,577	3,288.50	1,074	7,327.20	150	3,150.00	10,477.20	1,024	8,887.80	30,671.50
Smoky Lake, Municipal	3,442	3,442.00	3,335	1,667.50	579	3,927.70	85	1,445.00	5,372.70	1,388	11,874.55	22,356.75
Spirit River, Holy Cross	15,742	15,742.00	13,424	6,712.00	981	6,665.30	129	2,193.00	8,858.30	3,868	32,228.85	63,541.15
St. Paul, St. Theresa	15,909	15,909.00	14,785	7,392.50	2,199	15,063.70	223	4,683.00	19,746.70	2,980	25,851.20	68,899.40
Stettler, Municipal	18,585	18,585.00	16,543	8,271.50	2,094	14,176.20	270	5,670.00	19,846.20	2,736	22,437.80	69,140.50
Taber, Municipal	19,639	19,639.00	16,736	8,368.00	2,572	17,526.60	341	7,161.00	24,687.60	2,250	18,370.20	71,064.80
Three Hills, Municipal	6,418	6,418.00	5,844	2,922.00	867	5,937.10	103	2,163.00	8,100.10	592	5,444.70	22,884.80
Tofield, Municipal	8,805	8,805.00	7,402	3,701.00	812	5,514.60	108	2,268.00	7,782.60	1,907	16,614.35	36,902.95
Trochu, St. Mary's	5,748	5,748.00	5,442	2,721.00	515	3,502.50	59	1,003.00	4,505.50	1,109	8,528.00	21,502.50
Turner Valley, Municipal	8,891	8,891.00	8,889	2,944.50	382	2,558.60	51	867.00	3,425.60	1,205	9,636.65	22,897.75
Two Hills, Municipal	8,972	8,972.00	8,478	4,239.00	759	5,123.70	91	1,911.00	7,034.70	2,218	19,880.30	40,126.00
Vegreville, St. Joseph's	20,903	20,903.00	19,290	9,645.00	1,505	11,204.50	180	4,500.00	15,704.50	5,802	54,241.60	100,494.10
Vermilion, Municipal	10,438	10,438.00	10,058	5,029.00	1,260	8,552.00	165	3,465.00	12,017.00	1,833	15,379.40	42,863.40
Viking, Municipal	9,658	9,658.00	9,181	4,590.50	1,114	7,523.20	115	1,955.00	9,478.20	1,146	9,572.85	33,299.55
Wadena, Our Lady's	3,119	3,119.00	2,852	1,426.00	644	4,396.20	62	1,054.00	5,450.20	829	7,187.05	17,182.25
Vulcan, Municipal	9,491	9,491.00	8,686	4,343.00	1,128	7,623.40	135	2,295.00	9,918.40	655	5,826.10	29,578.50
Wainwright, Municipal	13,254	13,254.00	11,540	5,770.00	1,623	11,013.90	222	4,662.00	15,675.90	2,092	17,980.25	52,680.15

Westlock, Immaculata	23,957	23,957.00	21,921	10,960.50	2,418	16,352.40	268	5,628.00	21,980.40	4,564	39,569.95	96,467.85
Wetaskiwin, Community	18,124	18,124.00	13,646	7,823.00	2,411	16,220.30	342	7,182.00	23,602.30	3,047	26,599.75	76,149.05
Willingdon, General	5,626	5,626.00	5,186	2,553.00	516	3,562.80	55	935.00	4,497.80	2,005	17,343.55	30,060.35
Total for Approved Hospitals	2,078,121	2,078,120.80	1,611,024	806,028.40	234,569	1,842,458.00	32,264	917,354.00	2,759,812.00	254,266	2,453,089.05	8,097,050.25
PRIVATE HOSPITALS:												
Sexsmith					669	3,345.00	69	345.00	3,690.00			3,690.00
Swalwell					387	1,741.50			1,741.50			1,741.50
Total for Private Hospitals					1,056	5,086.50	69	345.00	5,431.50			
TOTAL FOR ALL HOSPITALS	2,078,121	2,078,120.80	1,611,024	806,028.40	235,625	1,847,544.50	32,333	917,699.00	2,765,243.50	254,266	2,453,089.05	8,102,481.75

Not Included in Above:

\$42,254.00 paid to the Calgary Alberta Red Cross Hospital on behalf of 17,605 Orthopaedic Days \$ 42,254.00
 35,112.00 paid to the Calgary General Hospital on behalf of 5,034 Psychiatric Days 35,112.00
 29,813.00 paid to the University Hospital at Edmonton on behalf of 4,259 Psychiatric Days 29,813.00

Outpost Grants As Follows:

Cold Lake, John Neil 2,480 days at \$1.80 and 954 days at \$1.30 5,704.20
 Fort McMurray, St. Gabriel's 2,183 days at \$1.80 and 941 days at \$1.30 4,763.40
 Fort Vermilion, St. Theresa 3,183 days at \$1.80 and 1,039 days at \$1.30 6,995.50
 Manning, Municipal 3,808 days at \$1.80 and 542 days at \$1.30 7,559.00

Hospitalization of Maternity cases in border hospitals outside the Province

1,237.55
 \$133,436.65

TABLE 11 — PROVINCIAL HOSPITALIZATION, PAYMENTS TO LOCAL AUTHORITIES—
UNDER THE PROVINCIAL-MUNICIPAL PLAN—1957

LOCAL AUTHORITY	No. of Participating Months	ADULTS 16 AND OVER		CHILDREN UNDER 16		NEWBORN		SPECIAL SERVICES		TOTAL	
		Days	AMOUNT	Days	AMOUNT	Days	AMOUNT	Days	AMOUNT	Days	AMOUNT
Alliance, Village	8	133	487.65	148	416.64	.....	.....	281	305.64	281	1,209.93
Andrew, Village	12	311	1,149.84	72	203.95	.....	.....	249	392.04	383	1,745.83
Arrowwood, Village	12	103	360.15	57	156.18	.....	.....	154	175.68	154	692.01
Athabasca, M.H.D.	12	5,135	19,162.63	1,513	4,482.09	48	56.40	6,648	8,210.16	6,696	31,911.28
Banff, M.H.D.	12	140	486.00	130	382.20	18	21.60	270	291.60	288	1,181.40
Barthhead, M.H.D.	12	3,137	11,539.50	381	1,197.18	18	21.60	3,518	4,311.18	3,536	17,069.46
Bashaw, Village	12	6,879	24,609.69	2,089	6,307.74	49	58.80	8,968	10,394.28	9,017	41,370.51
Bassano, M.H.D.	12	548	2,111.64	94	307.32	.....	.....	642	884.16	642	3,303.12
Beaif, Village	12	4,168	15,203.43	1,357	4,138.95	54	64.80	5,525	5,884.20	5,579	25,291.38
Beaver, M.D.	12	176	670.08	43	128.22	.....	.....	219	279.72	219	1,078.02
Beaverlodge, M.H.D.	12	85	320.70	5	17.10	.....	.....	90	129.60	90	467.40
Bentley, M.H.D.	12	2,024	7,397.53	354	961.32	.....	.....	2,378	2,478.36	2,378	10,837.21
Berwyn, M.H.D.	12	1,629	5,978.55	716	2,126.01	7	8.40	2,345	2,741.76	2,352	10,854.72
Beverley, Town	12	1,878	7,087.44	803	2,757.81	16	19.20	2,681	3,204.90	2,697	13,069.35
Bittern Lake, Village	12	3,131	14,490.48	1,242	5,042.16	70	84.00	4,373	7,835.04	4,443	27,451.68
Bonnyville, Town	12	8	28.92	.....	.....	.....	.....	8	11.52	8	40.44
Bonnyville, M.D.	12	791	2,953.92	314	949.29	20	24.00	1,105	1,320.48	1,125	5,247.69
Bow Island, M.H.D.	12	2,999	10,947.42	1,472	4,261.95	41	49.20	4,471	5,288.22	4,512	20,546.79
Boyle, M.H.D.	12	2,836	9,481.95	788	2,484.78	.....	.....	3,324	4,561.56	3,324	16,528.29
Boyle, M.H.D.	12	2,649	12,240.42	1,391	5,623.80	66	79.20	4,040	4,188.48	4,106	25,131.90
Brookton, Village	12	1,560	6,096.99	711	2,119.11	.....	.....	2,271	2,966.40	2,271	11,182.50
Brookton, M.H.D.	6	70	332.46	.....	.....	9	10.80	70	117.36	79	460.62
Brookton, M.H.D.	12	7,202	26,084.73	1,800	5,365.40	112	134.40	8,995	10,453.44	9,114	42,079.97
Bruderheim, Village	12	255	973.29	33	107.22	.....	.....	288	458.16	288	1,496.67
Calgary City, General	12	67,180	311,321.40	12,331	50,191.95	746	895.20	79,541	143,173.80	80,307	505,582.35
Calgary City, with Grace	12	444	146.52	6	15.48	65	78.00	530	697.57	530	294.00
Calgary City, with Holy Cross	12	32,466	150,566.45	6,290	25,443.90	445	534.00	38,754	69,757.29	39,201	246,301.55
Calgary City—Emergency and Referred	12	3,419	14,472.86	839	3,118.32	103	123.60	4,228	6,908.64	4,361	24,623.42
Calgary Rural, M.H.D.	12	12,826	59,428.95	3,366	13,568.85	111	133.20	16,192	29,145.60	16,503	102,271.60
Calgary Rural, M.H.D.	12	3,355	12,072.48	846	2,519.60	.....	.....	4,192	4,705.56	4,192	19,297.64
Calmar, Town	12	561	2,579.85	89	342.72	.....	.....	650	1,119.78	650	4,042.35
Camrose, M.D.	12	4,472	17,231.27	651	2,195.89	33	39.60	5,123	7,467.66	5,156	26,934.42
Camrose, M.D.	12	5,827	22,422.36	1,287	4,309.86	36	43.20	7,161	10,395.36	7,161	37,150.78
Cardston, M.H.D.	12	4,650	16,694.25	1,865	2,471.28	.....	.....	5,515	5,644.26	5,515	24,869.79

Castor, M.H.D.	12	3,754	13,403.13	1,417	4,088.07	49	58.80	5,171	5,099.04	5,220	22,649.04
Cereal, M.H.D.	12	767	2,919.42	1,182	3,633.96	71	85.20	1,949	1,020.16	1,020	4,691.67
Chipman, Village	12	1,141	2,255.66	1,141	3,633.96	.....	.....	1,183	1,263.52	1,183	4,883.14
Clareholm, M.H.D.	12	5,141	18,262.20	603	1,698.51	18	21.60	5,744	6,458.76	5,762	26,441.07
Cold Lake, Town	12	3,229	7,098.36	1,236	3,860.72	24	28.80	3,355	2,943.18	3,376	1,431.06
Conquest, M.H.D.	12	2,221	8,227.65	468	1,431.18	54	64.80	2,689	2,903.58	2,743	12,837.21
Cowley, M.H.D.	12	3,608	12,966.36	822	2,404.95	.....	.....	4,430	4,460.40	4,430	19,831.71
Cowley, Village	12	257	840.66	7	19.86	.....	.....	264	299.52	264	1,160.04
Crow's Nest Pass, M.H.D.	12	6,132	21,894.89	925	2,729.16	79	94.80	6,978	8,262.18	7,136	32,981.03
Dayland, M.H.D.	12	3,964	14,337.72	2,175	6,499.29	4	4.80	6,139	6,700.32	6,143	27,542.13
Deburne, M.H.D.	12	1,308	4,879.65	286	879.09	22	26.40	1,563	1,869.48	1,616	7,654.62
Devon, Town	12	705	2,667.81	840	2,425.86	.....	.....	1,545	1,625.40	1,545	6,719.07
Devon, M.H.D.	12	3,943	14,365.05	1,200	3,486.45	15	18.00	5,143	5,988.60	5,158	23,858.10
Drayton Valley	12	141	639.70	117	471.75	8	9.60	258	464.40	266	1,585.45
Drumheller, M.H.D.	12	11,776	45,626.25	1,882	6,298.73	25	30.00	13,658	20,174.22	13,683	72,130.20
Edmonton City with General	12	3,178	11,451.54	1,048	3,057.24	32	38.40	4,226	4,307.04	4,258	18,854.22
Edmonton City with Royal Alexandra	12	28,619	133,197.75	7,456	30,163.38	199	238.40	36,064	64,887.00	36,274	228,486.93
Edmonton City with Misericordia	12	27,471	127,217.44	6,742	27,348.58	197	236.40	34,193	61,529.40	34,410	216,331.82
Edmonton City with University	12	39,765	185,182.35	11,976	48,495.20	776	931.20	51,941	93,493.80	52,517	328,106.55
Edmonton City with Emergency and Referred	12	38,662	179,464.88	5,083	20,572.65	469	561.60	43,735	78,722.70	44,214	279,321.83
Edson, Town	12	2,154	8,828.05	351	1,202.41	24	27.30	2,501	3,645.02	2,529	13,702.78
Elk Point, M.H.D.	12	1,511	6,306.84	245	749.67	.....	.....	1,756	2,559.42	1,756	9,615.93
Elmora, M.H.D.	12	4,557	16,110.78	2,704	7,897.53	18	21.60	7,261	8,326.08	7,279	32,355.99
Empress, M.H.D.	12	1,210	4,462.74	194	559.20	.....	.....	1,404	1,433.34	1,404	6,455.28
Entwistle, Village	12	1,240	4,305.60	302	863.76	.....	.....	1,542	1,387.80	1,542	6,557.16
Evansburg, Village	12	139	637.65	29	121.35	1	1.20	168	302.40	169	1,062.60
Fairview, M.H.D.	12	102	459.30	69	263.35	43	51.60	7,991	307.80	171	1,030.65
Ferintosh, Village	12	6,334	23,280.80	1,657	4,870.47	.....	.....	7,991	9,648.90	8,034	37,851.77
Flagstaff, M.D.	12	120	470.43	2	7.08	.....	.....	122	176.76	122	654.27
Fort Saskatchewan, Town	12	8,662	31,131.39	3,707	10,981.50	36	43.20	12,369	13,632.84	12,405	55,788.93
Forestburg, Village	12	750	3,382.82	308	1,206.33	23	27.60	1,058	1,841.40	1,081	6,468.15
Forest Lawn, Town	12	768	2,709.57	433	1,270.08	.....	.....	1,201	1,113.48	1,201	5,063.13
Forty Mile, M.D.	12	2,179	10,015.71	666	2,742.90	60	72.00	2,845	5,105.16	2,905	17,955.77
Galahad, Village	12	172	598.32	7	23.52	.....	.....	92	150.84	179	772.98
Glenora, Village	12	207	818.85	87	261.06	.....	.....	294	389.16	294	1,469.07
Glenora, M.H.D.	12	1,857	6,958.02	497	1,330.28	.....	.....	2,352	2,510.57	2,354	10,896.77
Grand Centre, Village	12	1,199	679.26	204	584.52	17	20.40	1,063	1,871.64	1,081	4,821.54
Grande Prairie, M.H.D.	12	11,735	43,534.31	3,663	11,076.31	37	37.20	15,478	18,389.98	15,478	72,971.63
Granum, Town	12	6,869	21,947.86	1,603	4,739.40	43	51.60	8,445	9,992.92	8,478	2,304.15
Hanna, M.H.D.	12	2,288	1,257.21	48	167.62	4	4.80	8,445	9,992.98	8,488	39,630.96
Hay Lakes, Village	12	665	2,324.10	270	886.35	.....	.....	935	1,092.60	935	4,303.05
High Prairie, Town	12	8,530	31,748.25	1,835	5,629.26	66	79.20	10,362	12,816.36	10,431	50,273.07
Hinton, M.H.D.	12	349	1,450.53	196	496.44	34	40.80	409	549.54	433	2,237.31
Hinton, Town	12	827	3,154.08	126	414.36	.....	.....	953	1,262.78	953	4,831.22
Hughenden, M.H.D.	12	1,728	6,363.75	386	1,116.42	.....	.....	2,102	2,312.46	2,114	9,792.63
Innisfail, M.H.D.	12	4,478	16,353.39	1,232	3,717.36	77	75.60	5,708	6,812.46	5,785	26,958.81
Innisfree, Village	8	83	332.58	40	141.60	.....	.....	123	167.40	123	641.58

TABLE 11 — PROVINCIAL HOSPITALIZATION, PAYMENTS TO LOCAL AUTHORITIES—
UNDER THE PROVINCIAL - MUNICIPAL PLAN, 1957 (Continued)

LOCAL AUTHORITY	No. of Participating Months	ADULTS 16 AND OVER		CHILDREN UNDER 16		NEWBORN		SPECIAL SERVICES		TOTAL	
		Days	Amount	Days	Amount	Days	Amount	Days	Amount	Days	Amount
Irma, M.H.D.	12	1,020	3,777.89	139	385.62	18	21.60	1,159	1,234.26	1,159	5,347.77
Islay, M.H.D.	12	2,445	8,554.61	1,160	3,296.88	...	...	3,605	3,562.47	3,623	15,535.56
Jasper, M.H.D.	12	3,310	1,938.50	1,000	387.03	...	...	410	512.10	410	2,187.93
Jasper Place, Town	12	7,536	34,931.57	3,728	14,931.57	206	333.60	11,262	20,213.46	11,468	70,416.75
Killam, Village	12	603	2,171.07	158	452.12	...	...	761	899.64	761	3,562.83
Kinuso, Village	12	121	431.51	43	37.74	...	...	134	165.60	134	638.85
Kilsooty, Village	12	117	427.35	43	113.76	...	...	159	179.64	159	714.75
Lac La Biche, Town	12	739	2,575.92	482	1,203.98	...	...	1,221	1,410.48	1,221	5,194.38
Lacombe, M.H.D.	12	8,696	31,538.55	2,170	6,608.10	41	49.20	10,866	12,918.96	10,907	51,114.81
Lac Ste. Anne, M.D.	12	2,454	10,936.50	911	3,419.16	...	...	3,365	5,627.16	3,365	19,982.82
Lomond, Village	12	12	59.40	...	...	...	...	12	21.60	12	81.00
Lamont, Village	12	786	3,023.19	248	843.69	...	...	1,034	1,524.60	1,034	5,331.48
Lamont, M.D.	12	7,730	29,595.06	2,232	7,139.94	18	21.60	9,962	13,540.50	9,980	50,297.10
Leduc, M.D. (with Edmonton Hospitals)	12	5,580	25,771.20	970	3,888.75	56	67.20	6,544	11,779.20	6,606	41,506.35
Leduc, M.D.	12	985	3,432.42	379	1,106.91	6	7.20	1,364	1,524.24	1,370	6,070.77
Legal, Village	12	893	3,956.37	292	1,081.02	...	...	1,185	1,992.04	1,185	7,028.23
Legat, Village	12	352	1,454.94	166	531.03	...	...	518	753.12	518	2,739.09
Lethbridge, M.H.D. with Coaldale	12	2,431	8,431.98	780	2,244.00	18	21.60	3,211	2,889.90	3,229	13,587.48
Lethbridge, M.H.D. with Municipal	12	24,393	94,639.38	5,764	18,801.09	271	325.20	30,153	44,224.36	30,428	158,010.03
Lethbridge, M.H.D. with St. Michael's	12	23,795	92,075.91	5,977	19,570.77	105	126.00	30,153	43,675.20	29,877	155,447.88
Lethbridge, M.H.D. Emergency and Referred	12	2,602	11,178.29	747	2,928.84	...	...	3,329	5,684.22	3,349	19,791.35
Little Bow, M.H.D.	12	1,745	6,112.23	334	1,003.20	...	...	2,079	1,999.80	2,079	9,115.23
Lloydminster, M.H.D.	12	8,629	31,417.80	2,436	7,736.19	109	129.60	11,050	13,415.94	11,174	52,699.53
Lodgepole, New Town	10	19	82.65	16	67.80	...	...	35	63.00	35	213.45
Loughheed, Village	12	291	1,092.18	89	256.02	...	...	380	402.84	380	1,751.04
McLennan, Town	12	950	3,464.37	367	1,062.51	15	18.00	1,317	1,526.76	1,332	6,071.64
MacLeod, M.H.D.	12	3,780	13,622.01	1,014	2,985.00	...	...	4,796	5,022.72	4,796	21,629.73
Magrath, M.H.D.	12	2,349	8,298.84	782	2,229.15	...	...	3,131	2,969.64	3,131	13,497.63
Ma-Me-O Beach, Village	12	76	274.68	...	...	...	...	...	82.08	76	356.76
Manning, M.H.D.	12	2,505	8,738.67	605	1,768.32	16	19.20	2,945	2,489.04	3,126	13,015.23
Mannville, M.H.D.	12	1,955	7,151.97	300	883.89	...	...	2,955	2,363.58	2,955	10,399.44
Mayerthorpe, M.H.D.	12	2,661	10,207.68	739	2,119.14	14	16.80	3,409	4,372.02	3,414	16,715.64
Medicine Hat, M.H.D.	12	18,031	69,857.31	3,319	10,896.75	190	228.00	21,350	31,087.80	21,540	112,069.86
Medicine Hat City	12	63	254.16	20	75.00	10	12.00	83	137.16	93	478.32
Mercer, M.H.D.	6	329	1,360.62	160	581.97	...	...	489	562.50	489	2,505.09
Millet, Village	12	167	631.80	33	101.13	16	19.20	200	249.45	216	1,001.61

Mile Village	128	465.27	25	74.70	154	169.92	154	709.89
Minum, M.D.	1,424	5,435.48	610	1,900.32	2,034	2,789.88	2,034	10,125.68
Minerville, Town	669	3,101.40	195	794.94	864	1,542.24	864	5,438.58
Muders	543	2,114.52	75	246.54	618	723.60	618	3,084.66
Municipal Affairs, I.D. 1	180	667.23	30	82.32	210	246.60	222	1,010.55
Municipal Affairs, S.A. 2 and 3	12	26.52	20	75.00	28	45.72	28	147.24
Municipal Affairs, I.D. 58	170	607.89	25	97.50	195	232.74	195	908.13
Municipal Affairs, I.D. 76 and 77	12	4,631.25	247	987.06	1,245	2,232.36	1,247	7,853.07
Municipal Affairs, I.D. 79	440	1,524.39	91	238.29	531	577.26	531	2,339.94
Municipal Affairs, I.D. 78 and 95	3,471	15,052.41	1,110	3,894.05	4,581	7,092.54	4,607	26,070.20
Municipal Affairs, I.D. 101	710	2,418.63	258	697.08	968	841.86	968	3,957.57
Municipal Affairs, I.D. 102	3,592	13,274.33	1,966	5,786.34	5,492	6,606.36	5,607	25,725.83
Municipal Affairs, I.D. 107 and 108	720	2,671.95	70	210.93	790	956.88	790	3,839.76
Municipal Affairs, I.D. 109	382	1,589.40	169	572.40	551	801.00	551	2,962.80
Municipal Affairs, I.D. 125 and 126	2,504	9,165.15	792	2,452.80	3,280	3,866.40	3,388	13,594.75
Municipal Affairs, I.D. 124	1,103	3,884.22	362	1,063.30	1,465	1,686.60	1,465	6,654.12
Municipal Affairs, I.D. 138 and 146	726	2,607.45	118	349.44	844	962.28	863	3,941.97
Municipal Affairs, I.D. 147	1,878	6,276.48	759	2,029.98	2,637	1,631.16	2,637	9,937.62
Municipal Affairs, I.D. 946	76	305.22	29	94.32	105	143.10	105	542.64
Mynnam, M.H.D.	1,670	6,160.59	647	1,889.18	2,317	2,362.14	2,320	10,425.51
New Norway, Village	153	635.19	51	176.34	204	321.48	204	1,433.11
Okotoks, Town	460	1,716.72	66	218.82	525	652.32	526	2,581.84
Olds, M.H.D.	4,209	15,996.10	1,079	3,191.16	5,288	6,360.78	5,335	25,863.44
Onaway, Village	12	57.00	23	82.25	33	58.00	33	212.25
Oyen, M.H.D.	1,873	7,038.15	620	1,867.57	2,493	3,220.02	2,506	12,161.34
Peace River, M.H.D.	5,691	20,664.73	2,328	6,937.45	8,019	9,413.10	8,058	37,022.08
Pembina, M.D.	735	2,736.91	111	1,046.89	866	3,822.12	866	14,922.80
Pincher Creek, M.D.	2,651	9,484.62	151	1,482.02	3,192	1,308.96	3,200	14,922.80
Pincher Creek, Town of	9	3,493.51	151	1,482.02	1,126	1,308.96	1,126	5,510.88
Ponoka, M.H.D.	6,075	21,515.53	1,631	4,822.60	7,655	8,952.30	7,700	35,667.03
Provost, M.H.D.	3,068	11,583.89	891	1,179.72	3,489	4,139.10	3,489	16,604.71
Provost, M.D.	12	186.60	11	31.38	471	423.90	471	2,039.88
Public Welfare Metis Colony No. 1	55	186.30	21	62.46	76	52.38	76	301.14
Public Welfare Metis Colony No. 3 and 4	12	285	793	2,263.14	1,078	1,182.24	1,102	4,488.33
Public Welfare Metis Colony No. 5	12	583	589	1,751.22	824	762.48	824	3,371.04
Public Welfare Metis Colony No. 8	12	235	164	467.52	195	176.22	195	750.12
Public Welfare Metis Colony No. 10	12	31	670	1,992.30	886	913.23	886	3,656.49
Radium, Village	64	238.32	64	57.60	64	57.60	64	295.92
Ravensburg, M.H.D.	12	8,996.26	490	1,439.52	2,958	3,105.90	2,983	13,511.70
Red Deer, M.H.D.	11,528	45,073.53	4,033	13,403.91	15,561	22,909.14	15,799	81,672.18
Redwater, Town	12	2,357.58	312	1,038.27	872	1,268.10	908	4,707.15
Rimby, M.H.D.	3,055	11,201.04	912	2,728.32	3,967	4,734.36	3,967	18,663.72
Rocky Mountain House, M.H.D.	3,087	11,054.88	897	2,671.68	3,984	4,582.26	4,002	18,330.42
Sangudo, Village	691	1,356.09	147	557.13	466	763.92	466	2,677.14
Sedgewick, Village	12	3,536.86	175	531.00	886	1,022.76	884	4,112.22
Smoky Lake, M.H.D.	823	3,208.96	202	610.20	1,021	1,253.16	1,043	5,063.92
Smoky Lake, M.H.D.	2,047	6,555.51	183	609.12	2,340	2,456.64	2,347	9,641.67
Smoky River, M.H.D.	5,299	19,392.64	4,631	13,488.00	9,916	11,462.40	10,012	44,441.44
Spirit River, M.H.D.	5,509	19,699.34	3,163	8,986.58	8,667	9,862.06	8,672	37,250.98
Spruce Grove, Village	236	1,074.00	7	26.25	243	643.70	243	1,537.65

TABLE 11 — PROVINCIAL HOSPITALIZATION, PAYMENTS TO LOCAL AUTHORITIES—
UNDER THE PROVINCIAL - MUNICIPAL PLAN, 1957 (Continued)

LOCAL AUTHORITY	No. of Participating Months	ADULTS 16 AND OVER		CHILDREN UNDER 16		NEWBORN		SPECIAL SERVICES		TOTAL	
		Days	Amount	Days	Amount	Days	Amount	Days	Amount	Days	Amount
St. Albert, Town	12	873	4,053.54	566	2,280.81	.....	.....	1,439	2,557.80	1,439	8,892.15
Settler, M.H.D.	12	8,244	37,076.01	2,246	6,538.38	.....	.....	10,990	12,533.04	10,990	50,147.43
Stony Plain, Town	12	664	2,676.80	53	214.35	3	3.60	717	1,290.60	720	4,585.35
Stony Plain, M.D.	12	4,904	22,638.79	1,258	5,054.40	28	33.60	6,158	11,031.84	6,156	38,778.63
St. Paul, M.H.D.	12	6,274	24,067.35	4,077	11,835.98	141	169.20	10,330	12,217.32	10,432	47,287.85
Strathcona, M.D. with Edmonton Hospital	12	5,178	24,047.70	1,753	6,952.35	122	146.40	6,931	12,475.80	7,053	43,592.25
Strathcona, M.D.	12	673	2,575.62	377	1,275.18	.....	.....	1,050	1,512.00	1,050	5,362.80
Strome, Village	12	384	1,327.88	159	461.98	.....	.....	497	504.90	583	2,314.68
Sturgeon River, M.D.	12	4,041	18,733.85	1,353	6,261.75	29	34.80	5,594	10,069.20	5,623	35,099.10
Sturgeon River, M.D.	12	8,433	30,006.24	1,988	5,773.75	65	78.00	1,219	1,288.44	1,219	5,262.54
Taber, M.H.D.	12	8,433	30,507.79	1,988	5,773.75	.....	.....	10,414	12,042.36	10,486	48,346.90
Thorhild, Village	12	134	560.16	106	344.82	.....	.....	240	356.94	240	1,291.92
Thorhild, County with Edmonton Hospitals	12	241	9,849.15	232	774.80	.....	.....	2,373	4,271.40	2,392	15,090.15
Thorhild, County	12	1,596	5,557.32	553	1,599.18	13	18.00	2,149	2,133.36	2,164	9,307.86
Thorsby, Village	12	93	424.35	35	134.85	.....	.....	128	230.40	128	789.60
Three Hills, M.H.D.	12	2,739	9,849.09	943	2,841.90	103	66.00	3,661	4,118.76	3,785	16,875.75
Tochud, M.H.D.	12	3,449	12,471.03	971	2,924.70	.....	.....	4,408	5,099.58	4,438	20,516.91
Trochu, M.H.D.	12	2,460	8,769.90	456	1,361.70	18	21.60	2,916	2,909.52	2,946	13,077.12
Turner Valley, M.H.D.	12	4,074	15,327.63	703	2,185.53	302	38.40	4,777	5,418.18	4,809	22,969.74
Two Hills, M.H.D.	12	3,408	12,197.10	1,583	4,813.28	23	27.60	4,991	5,906.08	5,014	22,844.01
Valleyview, Town	12	321	1,318.38	267	884.85	.....	.....	588	841.68	588	3,044.91
Vegreville, M.H.D.	12	7,240	28,580.07	3,039	9,658.06	39	46.80	10,279	15,164.30	10,318	53,449.23
Vermilion, M.H.D.	12	5,552	20,215.83	777	2,293.68	.....	.....	6,329	7,427.97	6,329	29,937.48
Viking, M.H.D.	12	4,242	14,998.99	1,598	4,633.44	106	127.20	5,840	5,606.22	5,946	25,365.85
Vulcan, M.H.D.	12	4,868	17,727.57	1,314	3,889.62	14	16.80	6,182	7,374.24	6,196	29,008.23
Warburg, M.H.D.	12	4,661	17,042.10	1,755	5,132.06	28	33.60	6,409	7,459.02	6,444	29,666.78
Warburg, Village	12	56	287.60	.....	.....	.....	.....	56	100.80	56	368.40
Waskana, Village	6	87	407.76	39	121.86	.....	.....	136	178.56	126	708.18
Westlock, Town	12	984	3,604.53	141	412.62	.....	.....	1,125	1,362.60	1,125	5,379.75
Westlock, M.D.	12	8,885	33,129.89	2,500	8,051.76	67	80.40	11,552	14,166.00	11,552	55,428.05
Wetaskiwin, M.D.	12	5,214	19,360.33	1,365	4,137.60	36	43.20	6,483	9,635.58	6,615	31,574.71
Wetaskiwin, City	12	2,485	9,566.61	534	1,605.66	16	19.20	3,019	3,850.20	3,035	15,041.67
Willowton, M.H.D.	12	1,963	7,362.76	919	2,918.04	51	61.20	2,882	3,428.78	2,933	13,768.78
Youngstown, Village	7	34	108.12	.....	.....	.....	.....	34	36.72	34	144.84
Total	.....	761,377	3,039,360.11	209,459	706,848.84	7,523	9,030.90	969,080	1,396,161.56	978,359	5,213,401.41

TABLE 12 — OPERATING EXPENDITURES—1957

HOSPITALS	Salaries and Wages	Medical, Surgical and Sterile Supplies	Drugs and Medicines	DIRECT EXPENDITURES				Miscellaneous	Expenditure—Excluding Depreciation and Capital Interest		Capital Interest	TOTAL EXPENDITURE		
				General Administration	Professional Care of Patients	General Services	Physical Plant		Total	Per Patient Day Incl. Newborn		Depreciation		
Athabasca, Municipal	61,010	1,861	6,532	3,735	2,873	17,248	8,089	313	101,661	8,65	12,602	6,345	120,608	10.26
Banff, Mineral Springs	97,784	4,329	8,383	5,012	11,732	19,747	12,742	166	136,446	12,61	12,706	13,79	149,152	13.79
Barhead, St. Joseph's	86,178	1,898	5,142	2,523	1,950	14,863	10,772	2,688	134,175	8,23	31,857	15,906	181,938	11.17
Bassano, Municipal	40,923	1,888	5,142	2,523	2,013	10,586	5,826	85	68,996	10,72	3,046		72,992	11.20
Beaverlodge, Municipal	35,662	1,700	4,556	1,558	935	5,250	10,070	123	59,854	10,95	11,564	4,886	76,304	13.96
Bentley, Municipal	24,652	799	2,675	1,660	1,097	5,421	4,972	482	41,758	12,61	6,853	1,024	49,635	14.99
Berwyn, Municipal	25,630	838	1,756	1,734	247	3,492	5,729	294	39,720	11,18	9,324	1,060	50,044	14.09
Blairmore, Crow's Nest Pass, Municipal	98,117	3,711	9,203	5,428	3,583	20,387	10,669	287	151,098	13,29	16,905	7,877	175,880	15.47
Bonnyville, Katherine H. Prittle	23,898	767	2,277	876	477	1,181	2,720	2,037	34,234	10,69	2,690		36,924	11.52
Bonnyville, St. Louis	81,723	.....	.....	4,031	8,692	8,384	8,496	.....	111,326	9,92	15,271	1,581	128,178	11.43
Brooks, Municipal	109,785	.....	.....	6,204	33,420	22,348	9,275	57	181,089	12,89	10,116	6,298	197,503	14.06
Calgary, Alberta Red Cross	274,745	8,438	3,075	7,720	6,715	28,330	11,760	972	341,755	12,06	4,839		346,595	12.23
Calgary, General	2,924,919	.....	.....	145,996	480,847	414,478	119,026	.....	4,085,266	20,27		4,085,266	20,27	
Calgary, Holy Cross	1,321,623	98,476	109,358	61,213	110,644	114,965	68,634	1,923	1,886,836	17,05	116,756	32,219	2,035,811	18.39
Calgary, Salvation Army Grace	55,175	2,689	1,231	2,861	72	8,630	8,292	1,084	80,034	16,72	17,537		97,571	20.39
Camrose, St. Mary's	257,563	11,007	24,737	14,212	10,751	28,411	20,149	821	367,651	12,96	31,095	9,576	408,322	14.40
Cardston, Municipal	66,160	8,560	12,022	7,106	1,515	15,047	6,769	8	117,189	15,15	4,188		121,376	15.69
Carmanagay, Little Bow Municipal	26,649	1,508	4,125	2,215	1,201	4,624	3,771	.....	43,012	16,32			43,012	
Castor, Our Lady of the Rosary	82,315	.....	.....	2,942	4,432	14,024	14,024	36	111,436	14,49	4,094		115,530	15.02
Cereal, Municipal	20,746	679	813	1,340	478	2,695	2,477	54	29,282	17,44	2,898	47	32,227	19.19
Clareholm, Municipal	83,481	16,261	810	2,167	4,603	9,751	10,840	402	128,315	12,17	7,404	2,349	138,068	13.09
Coadvale, Community	25,262	2,471	7,070	1,289	3,641	4,866	3,186	934	46,729	8,61	5,746		54,475	9.63
Cold Lake, John Neil	31,218	1,419	2,614	1,283	1,634	3,844	3,486	720	48,218	8,15	1,030		47,248	8.33
Consort, Municipal	30,402	.....	.....	1,573	5,242	7,338	7,840	23	52,418	12,26	6,772	1,179	60,369	14.12
Coronation, Municipal	26,998	.....	.....	1,879	6,962	4,790	5,855	270	46,754	8,52	3,062		49,822	9.08

TABLE 12 — OPERATING EXPENDITURES—1957 (Continued)

HOSPITALS	Salaries and Wages	Medical, Surgical and Sterile Supplies	Drugs and Medicines	DIRECT EXPENDITURES				Miscellaneous	Expenditure—Excluding Depreciation and Capital Interest		Capital Interest	EXPENDITURE TOTAL	
				General Administration	Professional Care of Patients	General Services	Physical Plant		Total	Per Patient Day Incl. % Newborn		Depreciation	
Daysland, Providence	43,949	900	5,671	2,801	3,290	9,073	5,638	.....	71,322	9.27	7,080	78,402	10.18
Desmarais, St. Martin's	8,291	6	53	455	.....	2,058	2,645	.....	13,508	4.42	1,840	15,348	5.03
Devon, Civic	32,366	.....	.....	673	7,038	3,698	3,451	26	47,252	20.26	.....	47,252	20.26
Didsbury, Municipal	69,935	9,946	13,597	5,898	1,718	16,039	9,302	3,220	129,655	14.32	21,466	149,159	16.48
Drumheller, Municipal	193,452	17,843	5,223	10,145	12,678	37,679	16,626	847	229,692	13.89	17,757	322,003	15.19
Eckville, Municipal	34,547	3,880	2,423	2,249	.....	9,967	11,095	128	64,289	10.77	9,956	76,289	12.78
Edmonton, Beauh. Home	19,790	1,553	1,373	5,386	.....	11,396	5,563	1,036	46,037	17.58	.....	46,037	17.58
Edmonton, General	1,353,705	98,647	89,763	62,534	35,244	185,201	84,290	1,090	1,910,474	14.89	153,780	2,170,283	16.91
Edmonton, Misericordia	1,264,626	78,048	88,975	72,754	59,472	97,590	97,590	39,630	1,771,781	15.11	99,607	1,902,351	16.23
Edmonton, Royal Alexandra	2,077,915	87,612	124,644	134,130	238,305	442,269	148,025	.....	3,272,900	16.08	74,424	3,429,538	16.84
Edmonton, University	2,929,376	220,626	154,262	159,503	248,848	357,020	231,996	1,123	4,302,754	17.20	116,952	4,673,903	18.69
Edson, St. John's	67,482	1,610	3,983	2,251	5,615	5,839	5,839	.....	90,181	9.27	6,033	96,214	9.89
Elk Point, Municipal	116,352	3,200	11,201	6,917	3,007	16,511	16,506	1,790	175,484	10.02	14,390	195,833	11.18
Elmore, Municipal	22,345	1,059	2,380	1,694	236	5,719	3,000	12	36,445	12.50	4,074	41,591	14.26
Empress, Municipal	30,104	.....	.....	2,211	3,146	6,849	3,524	904	46,738	14.53	3,190	49,928	15.52
Fairview, Municipal	64,463	5,379	6,395	4,167	2,415	14,138	8,130	100	105,187	9.09	11,920	118,997	10.29
Fort Macleod, Municipal	58,363	.....	.....	8,191	9,215	20,478	3,534	2,609	102,330	15.20	3,263	105,923	15.73
Fort McMurray, St. Gabriel	36,473	1,323	1,413	2,167	737	6,523	6,862	365	55,863	12.38	4,448	63,473	14.07
Fort Vermilion, St. Theresa	48,575	1,839	3,270	2,363	2,259	9,663	9,381	4	77,354	7.41	9,993	90,181	8.64
Galahad, St. Joseph's	53,569	1,133	4,878	1,904	800	11,219	9,980	.....	83,483	9.34	12,055	101,117	11.31
Glendon, Municipal	26,445	451	2,784	2,396	983	4,199	5,254	569	4,308	12.07	6,273	52,631	14.75
Grande Prairie, Municipal	165,421	5,388	15,930	10,614	24,983	36,306	21,535	3,721	283,898	10.98	14,255	299,591	11.58
Hanna, Municipal	101,492	3,639	6,883	5,695	5,750	9,609	12,034	.....	145,102	11.34	5,000	152,077	11.88
Hardisty, St. Anne's	48,248	1,162	2,021	2,290	1,829	8,852	3,609	.....	68,011	9.78	5,760	74,108	10.61
High Prairie, Municipal	115,663	6,332	10,236	4,423	3,532	14,117	9,993	57	164,354	8.53	8,534	173,320	8.97
High River, Municipal	99,579	4,834	12,152	7,106	8,790	20,122	10,211	468	163,262	11.73	8,656	174,262	12.52
Innisfail, Municipal	60,181	.....	.....	4,534	16,093	13,144	6,641	304	100,897	11.72	9,204	110,101	12.80
Islay, Municipal	23,419	497	1,296	1,983	270	4,648	4,203	.....	36,316	10.82	2,375	38,691	11.53
Jasper, Seton	42,247	2,241	2,604	1,802	3,199	6,177	8,454	.....	66,724	11.90	6,819	74,394	13.10
Killam, General	50,961	1,757	5,620	3,711	2,612	8,983	6,985	486	81,115	9.48	7,182	88,297	10.32
Lac La Biche, St. Catherine's	89,128	1,206	6,869	5,063	3,048	12,053	20,215	24	137,606	7.89	18,670	173,148	9.93
Lacombe, Municipal	120,305	2,372	1,337	6,296	18,365	18,652	10,189	8	176,324	11.47	14,775	194,066	12.62
Lanora, Archer Memorial	159,316	7,408	2,971	14,635	20,349	34,564	18,881	347	258,471	11.94	12,636	2,191,273	12.63
Lethbridge, Municipal	686,253	.....	.....	28,324	175,137	122,178	173,474	26,499	1,085,865	18.56	131,242	94,906	22.43
Lethbridge, St. Michael's	504,795	.....	.....	23,848	141,347	59,978	26,071	2,873	758,912	13.59	60,387	834,627	14.95

McLennan, Sacred Heart	110,085	2,670	8,113	7,899	3,098	12,178	25,972	.....	170,015	8,85	23,102	17,609	210,726	10,98
Magrath, Municipal	36,983	.....	.....	2,544	7,881	8,315	9,078	81	62,052	12,34	4,956	2,955	69,463	13,91
Manning, Municipal	26,309	1,598	1,769	2,598	7,800	8,374	9,072	3,346	57,287	10,72	11,519	2,838	61,111	13,91
Manville, Municipal	27,391	.....	.....	1,893	6,289	6,111	8,891	.....	48,515	11,26	3,596	.....	46,111	12,15
Mayerthorpe, Municipal	63,100	7,226	7,677	4,498	2,432	12,784	8,902	1,650	108,268	14,72	8,287	2,827	111,382	16,24
Medicane Hat, General	408,043	.....	.....	15,773	100,483	66,544	16,559	3,515	610,917	14,37	.....	96,012	706,928	16,62
Mercoal, Municipal	10,577	.....	.....	1,118	1,063	2,407	1,261	.....	16,447	7,16	1,793	1,293	19,533	8,51
Mundare, General	37,518	.....	.....	1,983	2,730	5,171	8,878	.....	56,280	10,36	3,118	59,389	59,389	10,93
Myrnam, Municipal	32,591	.....	.....	2,417	5,778	6,749	7,322	.....	54,857	12,78	12,748	3,278	70,883	15,90
Olds, Municipal	82,677	2,434	7,149	5,137	10,756	15,966	10,019	385	134,523	14,41	9,355	2,436	146,315	15,67
Oyen, Municipal	20,126	.....	.....	1,872	14,511	4,213	5,917	168	46,806	16,31	3,494	477	50,778	17,70
Peace River, Municipal	93,481	.....	.....	6,003	24,742	18,781	16,071	39	159,117	11,00	10,271	1,786	171,174	11,83
Pincher Creek, St. Vincent's	75,277	.....	4,142	5,559	6,964	7,264	12,175	.....	111,380	10,41	13,852	.....	125,232	11,71
Ponoka, Municipal	95,107	.....	.....	7,021	13,031	13,678	13,536	50	142,422	12,51	20,664	6,641	169,727	14,91
Provost, Municipal	55,853	2,679	3,884	2,591	4,204	7,753	8,701	155	85,819	15,99	8,559	4,123	98,502	18,35
Radway, St. Joseph's	37,933	1,153	2,013	3,256	1,743	6,655	5,128	.....	57,881	12,05	2,494	.....	60,375	12,57
Raymond, Municipal	31,205	1,829	4,322	1,703	3,775	6,522	2,333	254	51,942	12,87	2,843	991	55,777	13,82
Red Deer, Municipal	309,690	7,574	39,501	12,381	15,378	44,976	18,895	5,248	453,643	14,25	29,901	12,059	495,603	15,57
Rimbey, Municipal	70,519	5,545	6,941	5,331	3,641	19,458	10,442	96	121,974	12,37	9,225	3,780	134,979	13,69
Rocky Mountain House, Municipal	49,145	.....	.....	2,980	5,853	8,783	15,067	434	82,261	10,01	10,679	5,711	98,651	12,00
Smoky Lake, Municipal	26,045	1,423	2,540	1,871	1,970	.....	3,687	321	37,858	12,38	2,311	1,684	41,853	13,69
Spirit River, Holy Cross	81,095	2,556	6,817	7,504	1,313	13,057	20,117	312	132,771	8,65	25,285	11,803	169,859	11,06
St. Paul, St. Theresa	119,457	4,092	7,495	3,938	3,119	18,072	8,893	.....	164,766	9,55	16,305	1,079	182,150	10,56
Stettler, Municipal	128,182	19,312	5,152	5,026	.....	20,253	9,325	287	187,537	10,62	9,638	3,368	200,543	11,35
Taber, Municipal	142,774	5,000	3,000	6,111	28,059	21,354	13,917	657	220,902	11,67	24,502	11,654	257,058	13,59
Three Hills, Municipal	49,881	3,269	3,279	3,051	1,007	7,741	8,574	.....	76,803	12,84	10,274	2,395	89,472	14,96
Torried, Municipal	49,761	4,704	8,715	3,314	4,097	15,659	5,855	3,862	95,903	11,63	2,264	3,264	110,842	13,28
Trochu, St. Mary's	43,070	332	2,624	1,379	7,776	5,487	7,490	.....	65,158	11,39	9,593	3,429	74,149	13,26
Turon Valley, Municipal	44,975	3,559	4,772	3,525	1,927	11,246	6,881	500	76,985	11,33	4,106	1,421	81,283	11,96
Two Hills, Municipal	52,315	.....	.....	3,339	10,195	10,839	6,410	.....	83,099	9,73	14,347	4,022	101,468	11,88
Vegreville, St. Joseph's General	158,811	8,623	23,371	10,185	11,980	13,925	15,154	96	242,145	11,60	23,010	144	265,299	12,71
Vermilion, Municipal	71,484	2,730	3,892	5,930	2,097	11,094	9,678	.....	106,844	10,38	17,500	7,950	132,294	12,85
Viking, Municipal	71,616	4,461	12,876	5,330	2,850	9,795	7,676	22	114,827	12,89	14,422	4,413	133,662	15,01
Vilna, Our Lady's	33,343	471	770	1,627	262	3,410	4,403	2	44,282	11,57	3,732	.....	48,020	12,54
Vulcan, Municipal	55,530	.....	.....	3,962	8,439	10,169	9,848	172	88,120	9,96	9,380	1,598	99,098	11,20
Wainwright, Municipal	98,695	6,419	14,057	10,078	11,085	16,176	10,573	703	167,786	13,15	17,144	5,107	190,037	14,89
Westlock, Immaculate	121,730	4,068	11,283	4,511	8,185	18,911	10,161	634	179,483	7,88	25,014	3,100	207,597	9,12
Wetaskiwin, Community	104,677	5,784	10,103	4,160	4,352	20,022	7,465	.....	156,564	9,32	14,710	.....	171,274	10,20
Willington, General	38,078	.....	.....	2,467	2,551	3,837	4,836	182	51,951	9,83	4,076	.....	56,027	10,60
Total	19,906,876	848,818	1,001,520	1,101,954	2,105,447	2,899,715	1,636,771	124,833	29,626,034	14,27	1,669,530	965,490	32,261,054	15,54

* Included with Direct Expenditures, Professional Care of Patients

† Included with Drugs and Medicines

Alaska	122,230	303	162	122,731	120,697	6,345	101,650	7,421	11,960	5,318	162	5,135	1,127	4,196	11,577	9,234	10,829	2,533	2,101	20	889	26,957	3,709	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	9,475	20,268	29,473	
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Includes \$223,979 outpatient revenue.

Calgary Alberta Red Cross
\$668,352 outpatient revenue
\$892,331 outpatient revenue
excess from debenture issues, long term loans and construction grants
\$254,197 capital interest

TABLE 14—1957 TAX REQUISITION

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Athabasca M.H.D. No. 13					
M.D. No. 103	\$ 15,294.00	392,600	\$ 2,780,710.00	5.5	5,115
County of Thorhild	168.00		30,550.00	5.5	
L.I.D. No. 107	1,071.00		194,709.00	5.5	
L.I.D. No. 122	715.00		130,014.00	5.5	
Town of Athabasca	7,053.00		1,282,510.00	5.5	1,096
	<u>\$ 24,301.00</u>	<u>456,804</u>	<u>4,418,493.00</u>	<u>5.5</u>	<u>6,411</u>
Banff M.H.D. No. 71					
Banff National Park	\$ 13,300.00		\$13,300,000.00	1.	2,753
Lake Louise					53
Outlying Areas					43
	<u>\$ 13,300.00</u>	<u></u>	<u>\$13,300,000.00</u>	<u>1.</u>	<u>2,849</u>
Barrhead M.H.D. No. 67					
M.D. Westlock No. 92	\$ 474.00		104,220.00		
M.D. Lac Ste. Anne No. 93	467.00		102,630.00		
M.D. Barrhead No. 106	16,389.00		3,601,230.00		
L.I.D. No. 108	1,326.00		291,270.00		
Town of Barrhead	6,344.00		1,393,940.00		1,576
	<u>\$ 25,000.00</u>	<u>415,445</u>	<u>\$ 5,493,290.00</u>	<u>4.5</u>	<u>2,065</u>
Bassano M.H.D. No. 6					
County of Vulcan	\$ 4,385.00	98,470	\$ 1,152,314.00	3.8	425
County of Newell	10,540.00	537,854	2,770,048.00	3.8	1,600
M.D. of Wheatland No. 40	3,906.00	185,071	1,026,370.00	3.8	350
Town of Bassano	1,521.00		399,796.00	3.8	746
Village of Hussar	546.00		143,648.00	3.8	190
Village of Rosemary	342.00		89,926.00	3.8	200
	<u>\$ 21,240.00</u>	<u>821,395</u>	<u>\$ 5,582,102.00</u>	<u>3.8</u>	<u>3,511</u>
Beaverlodge M.H.D. No. 32					
County Grande Prairie No. 1....	\$ 15,802.00		\$ 1,316,770.00	12.	3,000
Town of Beaverlodge	8,068.00		672,330.00	12.	850
	<u>\$ 23,870.00</u>	<u>225,360</u>	<u>\$ 1,989,100.00</u>	<u>12.</u>	<u>3,850</u>
Bentley M.H.D. No. 43					
M.D. Lacombe No. 64	\$ 17,116.00		\$ 1,711,620.00	10.	
County of Ponoka No. 3	568.00		56,860.00	10.	
M.D. Red Deer No. 55	205.00		20,510.00	10.	
Village of Bentley	5,570.00		464,150.00	12.	
	<u>\$ 23,459.00</u>	<u>117,025</u>	<u>\$ 2,263,140.00</u>	<u>11.</u>	<u>2,192</u>
Berwyn M.H.D. No. 50					
M.D. of Peace	\$ 6,426.00		\$ 1,760,340.00	3.65	
L.I.D. No. 138	680.00		186,399.00	3.65	
L.I.D. No. 139	374.00		102,325.00	3.65	
Town of Grimshaw	3,519.00	158	964,000.00	3.65	962
Village of Berwyn	1,501.00	111	322,095.00	4.65	370
	<u>\$ 12,500.00</u>	<u>234,516</u>	<u>3,335,219.00</u>	<u>3.7</u>	<u>2,605</u>
Bow Island M.H.D. No. 72					
M.D. Forty Mile No. 2	\$ 15,666.00		\$ 5,222,040.00	3.	3,275
Town of Bow Island	2,883.00		961,060.00	3.	990
Village of Foremost	1,589.00		429,815.00	3.	441
Village of Burdett	542.00		180,725.00	3.	224
	<u>\$ 20,680.00</u>	<u>300</u>	<u>\$ 6,893,640.00</u>	<u>3.</u>	<u>4,930</u>
Boyle M.H.D. No. 61					
Athabasca No. 103	\$ 6,084.00	141,454	\$ 1,058,020.00	5.75	
County of Thorhild No. 7	61.00	3,040	10,670.00	5.75	
L.I.D. No. 102	553.00	19,194	96,161.00	5.75	
Village of Boyle	2,117.00		368,080.00	5.75	
	<u>\$ 8,815.00</u>	<u>163,688</u>	<u>\$ 1,532,931.00</u>	<u>5.75</u>	<u>3,126</u>

TABLE 14 — 1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Brooks M.H.D. No. 28					
County of Newell No. 3	\$ 48,080.00	734,592	\$ 5,226,255.00	9.2	6,985
County of Vulcan No. 2	698.00	6,000	75,830.00	9.2	24
S. A. No. 4	626.00	57,040	68,057.00	9.2	100
I.D. No. 22	155.00	6,223	16,790.00	9.2	20
Town of Brooks	22,545.00		2,450,545.00	9.2	2,500
Village of Dutchess	1,266.00		137,648.00	9.2	210
Village of Tilley	1,434.00		155,960.00	9.2	197
	<u>\$ 74,804.00</u>	<u>803,855</u>	<u>8,131,085.00</u>	<u>9.2</u>	<u>10,037</u>
Calgary Rural M.H.D. No. 63					
M.D. of Foothills No. 31	\$ 5,370.00		\$ 2,683,318.00	2.	2,000
M.D. of Wheatland No. 40	18,340.00		9,167,270.00	2.	4,680
M.D. of Rocky View No. 44	37,800.00		18,903,263.00	2.	12,546
M.D. of Kneehill No. 48	3,830.00		1,915,068.00	2.	1,300
M.D. of Mountain View No. 49	4,000.00		1,998,113.00	2.	1,800
L.I.D. No. 46	2,780.00		1,388,888.00	2.	4,608
L.I.D. No. 946	560.00		279,641.00	2.	2,438
L.I.D. No. 50	40.00		15,916.00	2.	75
Town of Gleichen	980.00		272,536.00	2.	435
Town of Strathmore	2,180.00		728,170.00	2.	717
Village of Acme	740.00		227,869.00	2.	287
Village of Airdrie	680.00		190,173.00	2.	299
Village of Bieseker	1,170.00		423,150.00	2.	320
Village of Cluny	380.00		100,020.00	2.	172
Village of Cochrane	1,670.00		478,835.00	2.	711
Village of Crossfield	980.00		267,035.00	2.	450
Village of Irricana	390.00		114,338.00	2.	165
Village of Rockyford	580.00		169,950.00	2.	240
Village of Standard	740.00		251,595.00	2.	230
	<u>\$ 83,210.00</u>	<u>2,302,508</u>	<u>\$39,575,198.00</u>	<u>2.</u>	<u>33,383</u>
Cardston M.H.D. No. 5					
M.D. of Cardston No. 6	\$ 38,402.00		\$ 5,486,095.00	7.	3,819
Town of Cardston	15,816.00		2,259,451.00	7.	2,500
	<u>\$ 54,218.00</u>	<u>900,000</u>	<u>\$ 7,745,546.00</u>	<u>7.</u>	<u>6,319</u>
Castor M.H.D. No. 41					
M.D. of Paintearth No. 53	\$ 8,799.00		\$ 2,933,013.00	3.	1,900
County of Stettler No. 6	137.00		45,470.00	3.	50
Town of Castor	2,750.00		916,640.00	3.	952
Village of Halkirk	504.00		168,204.00	3.	160
	<u>\$ 12,190.00</u>	<u>375,184</u>	<u>\$ 4,063,427.00</u>	<u>3.</u>	<u>3,062</u>
Cereal M.H.D. No. 46					
S. A. No. 3	\$ 20,400.00	715,588	\$ 1,394,425.00	14.6	
Village of Cereal	1,635.00	60	111,770.00	14.6	161
	<u>\$ 22,035.00</u>	<u>715,648</u>	<u>\$ 1,506,195.00</u>	<u>14.6</u>	<u>1,036</u>
Claresholm M.H.D. No. 24					
M.D. Willow Creek No. 26	\$ 17,964.00		\$ 5,132,500.00	4.	4,200
Town of Claresholm	9,153.00		2,615,365.00	3.5	3,000
Town of Stavely	1,449.00		414,110.00	3.5	395
	<u>\$ 28,566.00</u>	<u>344,526</u>	<u>\$ 8,161,975.00</u>	<u>3.7</u>	<u>7,595</u>
Consort M.H.D. No. 22					
S. A. No. 3	\$ 20,745.00		\$ 2,312,730.00	9.	2,000
Village of Consort	3,684.00		411,030.00	9.	450
	<u>\$ 24,429.00</u>	<u>776,029</u>	<u>\$ 2,723,760.00</u>	<u>9.</u>	<u>2,450</u>
Coronation M.H.D. No. 39					
M.D. of Paintearth	\$ 9,075.00		\$ 2,268,737.00	4.	
M.D. of Provost	222.00		55,510.00	4.	
S.A. No. 2 and 3	1,925.00		481,253.00	4.	
Town of Coronation	3,320.00		830,000.00	4.	
	<u>\$ 14,542.00</u>	<u>593,619</u>	<u>\$ 3,635,500.00</u>	<u>4.</u>	<u>3,050</u>

TABLE 14 — 1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Crows Nest Pass M.H.D. No. 40					
M.D. of Pincher Creek No. 9.	\$ 1,794.00		\$ 142,470.00	12.595	175
L.I.D. No. 10	29,819.00		2,367,536.00	12.595	3,251
Town of Blairmore	14,631.00		1,161,637.00	12.595	
Town of Coleman	8,414.00		668,045.00	12.595	1,845
Village of Frank	1,337.00		106,175.00	12.595	221
	\$ 55,995.00	49,479	\$ 4,445,863.00	12.6	5,492
Daysland M.H.D. No. 58					
M.D. of Camrose No. 63	\$ 5,015.00		\$ 1,253,930.00	4.	
M.D. of Flagstaff No. 62	7,636.00		1,909,100.00	4.	
M.D. of Beaver No. 73	774.00		193,720.00	4.	117
Town of Daysland	2,021.00		505,418.00	4.	
	\$ 15,446.00	250,243	\$ 3,862,168.00	4.	3,401
Didsbury M.H.D. No. 33					
M.D. Mountain View No. 49	\$ 37,300.00	425,212	\$ 5,738,401.00	6.5	3,900
L.I.D. No. 50	164.00	7,209	25,314.00	6.5	
Town of Didsbury	8,604.00	902	1,323,925.00	6.5	1,193
Village of Carstairs	5,108.00	207	537,740.00	6.5	502
Village of Cremona	832.00	100	128,060.00	6.5	215
	\$ 52,008.00	432,630	\$ 7,753,440.00	6.5	5,810
Delburne M.H.D. No. 62					
Pt. M.D. of Red Deer	\$ 4,650.70	124,840	\$ 1,401,536.00	3.1	1,400
Village of Delburne	1,349.30		406,620.00	3.1	420
	\$ 6,000.00	124,840	\$ 1,808,156.00	3.1	1,820
Drumheller M.H.D. No. 3					
M.D. of Wheatland No. 40	\$ 15,960.00		\$ 2,060,198.00	7.75	1,230
M.D. of Starland No. 47	43,350.00		5,580,985.00	7.75	2,915
M.D. of Kneehill No. 48	21,110.00		2,710,885.00	7.75	3,000
L.I.D. No. 42	31,500.00		2,822,640.00	7.75	6,600
S. A. No. 2	1,500.00		192,440.00	7.75	120
City of Drumheller	18,930.00		2,440,540.00	7.75	2,563
Village of Munson	470.00		58,715.00	7.75	90
Village of Morrin	1,350.00		174,372.00	7.75	220
Village of Rumsey	550.00		70,402.00	7.75	121
Village of Della	1,990.00		257,400.00	7.75	265
Village of Carbon	1,640.00		213,000.00	7.75	387
	\$138,350.00	724,309	\$16,581,577.00	7.75	17,511
Drayton Valley M.H.D. No. 7					
I. D. No. 77	\$ 2,834.00	65,855	\$ 1,511,352.00	7.5	4,500
I. D. No. 78	949.00	6,637	505,928.00	7.5	2,000
Town of Drayton Valley	2,344.00		1,250,000.00	7.5	3,000
Town of Lodgepole	30.00		16,140.00	7.5	
Village of Cynthia	22.00		11,430.00	7.5	
	\$ 6,179.00	72,492	\$ 3,294,850.00	7.5	9,500
Eckville M.H.D. No. 30					
M.D. of Red Deer No. 55	\$ 4,999.00		\$ 989,900.00	5.05	
M.D. of Lacombe No. 64	8,472.00		1,677,730.00	5.05	
L.I.D. No. 65	4,597.00		910,433.00	5.05	
Village of Eckville	2,252.00		405,810.00	5.55	
	\$ 20,320.00	283,094	\$ 3,983,873.00	5.6	4,438
Elk Point M.H.D. No. 18					
M.D. of St. Paul No. 86	\$ 15,435.00	242,673	\$ 1,715,045.00	9.	3,000
M.D. of Bonnyville No. 87	1,422.00		158,030.00	9.	
M.D. of Eagle No. 85	2,114.00	24,396	234,905.00	9.	320
M.D. of Vermilion River No. 71	6,857.00	79,140	761,920.00	9.	954
L.I.D. No. 102	209.00	7,720	23,280.00	9.	
Village of Elk Point	\$ 4,235.00		470,610.00	9.	
	\$ 30,272.00	352,929	\$ 3,363,790.00	9.	6,472

TABLE 14—1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Elnora M.H.D. No. 44					
M.D. of Red Deer No. 55	\$ 10,382.00		\$ 1,092,814.00	9.5	550
M.D. of Kneehill No. 48	5,236.00		551,175.00	9.5	
Village of Elnora	2,083.00		198,465.00	10.5	200
	<u>\$ 17,701.00</u>	<u>167,160</u>	<u>\$ 1,842,454.00</u>	<u>9.8</u>	<u>1,849</u>
Empress M.H.D. No. 53					
M.D. of Acadia No. 34	\$ 6,796.00	132,315	\$ 849,510.00	8.	475
S.A. No's. 2 and 3	6,456.00	92,136	806,940.00	8.	538
L.I.D. No. 21	813.00	20,512	101,660.00	8.	125
Village of Empress	2,329.00	320	291,130.00	8.	475
	<u>\$ 16,394.00</u>	<u>245,283</u>	<u>\$ 2,049,240.00</u>	<u>8.</u>	<u>1,613</u>
Fairview M.H.D. No. 59					
M.D. of Fairview No. 136	\$ 9,641.00		\$ 2,410,342.00	4.	1,885
L.I.D. No. 139	6,562.00		1,640,459.00	4.	2,612
Town of Fairview	7,016.00		1,257,480.00	5.5	1,240
Village of Hines Creek	1,462.00		365,620.00	4.	352
	<u>\$ 24,681.00</u>	<u>487,898</u>	<u>\$ 5,673,901.00</u>	<u>4.4</u>	<u>6,089</u>
Glendon M.H.D. No. 57					
M.D. of Bonnyville No. 87	\$ 9,365.70	68,822	\$ 425,715.00	22.	1,500
M.D. of St. Paul No. 86	16.00	160	730.00	22.	
L.I.D. No. 101	6,904.50	79,917	313,841.00	22.	1,200
Village of Glendon	3,762.20		171,010.00	22.	400
	<u>\$ 20,048.40</u>	<u>148,899</u>	<u>\$ 911,296.00</u>	<u>22.</u>	<u>3,100</u>
Grande Prairie M.H.D. No. 14					
County of Grande Prairie No. 1	\$ 30,351.00	690,865	\$ 6,744,820.00	4.5	7,000
L.I.D. 111, 126, 132, and 134.	11,559.00	345,490	2,568,655.00	4.5	
Town of Grande Prairie	25,740.00		5,720,147.00	4.5	6,220
Village of Wembley	923.00		205,070.00	4.5	268
Village of Sexsmith	2,038.00		452,930.00	4.5	416
Village of Hythe	2,294.00		509,780.00	4.5	482
	<u>\$ 72,905.00</u>	<u>1,036,355</u>	<u>\$16,201,442.00</u>	<u>4.5</u>	<u>14,386</u>
Hanna M.H.D. No. 5					
M.D. of Starland No. 47	\$ 7,990.00		\$ 1,119,740.00	7.	500
County of Stettler	3,052.00		427,710.00	7.	338
Special Areas	23,985.00		3,361,288.00	7.	3,350
Town of Hanna	16,932.00		2,372,810.00	7.	2,200
Village of Craigmyle	1,113.00		156,003.00	7.	135
	<u>\$ 53,072.00</u>	<u>1,453,271</u>	<u>\$ 7,437,551.00</u>	<u>7.</u>	<u>6,523</u>
High River M.H.D. No. 11					
M.D. of Willow Creek No. 26....	\$ 8,632.00		\$ 2,466,250.00	3.5	
M.D. of Foothills No. 31	31,426.00		8,978,800.00	3.5	
County of Vulcan No. 2	7,631.00		2,180,260.00	3.5	
L.I.D. No. 27	134.00		38,430.00	3.5	
Town of Nanton	4,114.00		1,175,430.00	3.5	
Town of High River	8,457.00		2,416,420.00	3.5	
Village of Cayley	566.00		161,688.00	3.5	
Village of Blackie	850.00		242,830.00	3.5	
	<u>\$ 61,810.00</u>	<u>931,626</u>	<u>\$17,660,108.00</u>	<u>3.5</u>	<u>8,671</u>
Holden M.H.D. No. 63					
M.D. of Beaver	\$ 2,326.00		\$ 764,640.00	3.	270
Village of Holden	2,126.00		699,185.00	3.	320
	<u>\$ 4,452.00</u>	<u>55,697</u>	<u>\$ 1,463,825.00</u>	<u>3.</u>	<u>590</u>
Hughenden M.H.D. No. 51					
M.D. of Provost	\$ 6,610.16		\$ 1,652,540.00	4.	
M.D. of Flagstaff	24.56		6,140.00	4.	
Village of Hughenden	636.52		159,133.00	4.	
Village of Czar	564.80		141,200.00	4.	
Village of Amisk	362.88		90,720.00	4.	
	<u>\$ 8,198.02</u>	<u>658,636</u>	<u>\$ 2,049,733.00</u>	<u>4.</u>	<u>2,165</u>

TABLE 14 — 1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Innisfail M.H.D. No. 16					
M.D. of Red Deer No. 55	\$ 23,053.00	421,550	\$ 5,763,310.00	4.	12,409
M.D. of Mountain View No. 49	1,025.00		256,420.00	4.	
M.D. of Kneehill No. 48	1,123.00	21,000	280,978.00	4.	250
L.I.D. No. 58	164.00	10,576	41,080.00	4.	184
L.I.D. No. 65	461.00		115,290.00	4.	700
Town of Innisfail	6,474.00	394	1,618,600.00	4.	1,606
Village of Bowden	1,295.00	44	323,830.00	4.	207
	<u>\$ 33,595.00</u>	<u>453,564</u>	<u>\$ 8,399,508.00</u>	<u>4.</u>	<u>15,456</u>
Irma M.H.D. No. 55					
M.D. of Wainwright No. 61	\$ 5,666.00		\$ 1,113,145.00	5.	
M.D. of Flagstaff No. 62	323.00		64,780.00	5.	
Village of Irma	1,872.00		374,350.00	5.	410
	<u>\$ 7,861.00</u>	<u>105,096</u>	<u>\$ 1,572,275.00</u>	<u>5.</u>	<u>1,115</u>
Islay M.H.D. No. 4					
M.D. Vermilion River No. 71....	\$ 16,000.00	283,785	\$ 3,359,030.00	4.75	3,515
	<u>\$ 16,000.00</u>	<u>283,785</u>	<u>\$ 3,359,030.00</u>	<u>4.75</u>	<u>3,515</u>
Lacombe M.H.D. No. 54					
M.D. of Lacombe No. 64	\$ 28,982.00	426,240	\$ 7,833,150.00	3.7	7,350
M.D. of Camrose No. 63	88.00	4,480	23,880.00	3.7	50
County of Ponoka No. 3	\$ 539.00	16,205	145,810.00	3.7	130
Town of Lacombe	15,145.00	640	3,522,240.00	4.3	3,000
Village of Clive	763.00		206,273.00	3.7	350
Village of Blackfalds	592.00		160,066.00	3.7	400
Village of Alix	1,833.00		495,420.00	3.7	600
Village of Mirror	1,770.00	640	478,462.00	3.7	600
	<u>\$ 49,712.00</u>	<u>488,205</u>	<u>\$12,865,301.00</u>	<u>3.8</u>	<u>12,480</u>
Lethbridge M.H.D. No. 65					
M.D. of Willow Creek	\$ 616.00	2,000	\$ 49,280.00	12.5	15
M.D. of Lethbridge	130,480.50	573,000	10,438,440.00	12.5	11,000
M.D. of Cardston	640.14	5,064	51,210.00	12.5	50
M.D. of Forty Mile	15,483.38	217,360	1,238,670.00	12.5	500
County of Warner	87,074.60	654,000	6,965,968.00	12.5	3,470
M.D. of Taber	26,648.60	267,102	2,131,918.00	12.5	663
County of Vulcan	2,908.25	3,300	232,660.00	12.5	20
City of Lethbridge	389,857.32		31,188,585.00	12.5	30,000
Town of Coaldale	14,646.10		1,171,688.00	12.5	2,300
Village of Nobleford	2,881.95		230,555.00	12.5	290
Village of Barons	3,488.18		279,054.00	12.5	400
Village of Warner	4,393.60		351,488.00	12.5	445
	<u>\$679,118.62</u>	<u>1,719,826</u>	<u>\$54,329,516.00</u>	<u>12.5</u>	<u>49,153</u>
Little Bow M.H.D. No. 25					
M.D. of Lethbridge No. 25	\$ 2,488.00		\$ 311,050.00	8.	161
County of Vulcan No. 2	18,238.00		2,279,860.00	8.	1,100
Village of Champion	3,270.00		408,850.00	8.	411
Village of Carmangay	2,366.00		292,110.00	8.	295
	<u>\$ 26,332.00</u>	<u>196,371</u>	<u>\$ 3,291,870.00</u>	<u>8.</u>	<u>1,967</u>
Lloydminster M.H.D. No. 8					
M.D. of Vermilion River	\$ 27,000.00	453,120	\$ 9,880,720.00	5.	4,755
Town of Lloydminster	13,000.00	400	2,339,720.00	5.	2,531
Village of Marwayne	2,000.00	185	384,000.00	6.	360
	<u>\$ 42,000.00</u>	<u>537,982</u>	<u>\$11,704,440.00</u>	<u>5.3</u>	<u>7,646</u>
Macleod M.H.D. No. 48					
M.D. of Willow Creek No. 36....	\$ 17,482.00		\$ 3,156,220.00	6.	2,000
M.D. of Pincher Creek No. 9....	607.00		109,580.00	6.	60
M.D. of Lethbridge No. 25	2,515.00		454,130.00	6.	247
Town of Fort Macleod	12,192.00		2,201,100.00	6.	2,500
	<u>32,796.00</u>	<u>443,003</u>	<u>\$ 5,921,030.00</u>	<u>6.</u>	<u>4,806</u>

DIVISION OF HOSPITAL AND MEDICAL SERVICES

TABLE 14 — 1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Magrath M.H.D. No. 29					
M.D. of Cardston No. 6	\$ 17,448.52	233,778	\$ 2,884,035.00	6.05	2,800
County of Warner No. 5	1,283.16	29,439	212,090.00	6.05	
Town of Magrath	7,350.82	1,300	1,215,000.00	6.05	1,364
	<u>\$ 26,082.50</u>	<u>264,515</u>	<u>4,311,115.00</u>	<u>6.05</u>	<u>4,164</u>
Manning M.H.D. No. 70					
L.I.D. No. 138	\$ 28,917.00		\$ 1,301,810.00	20.	3,457
Town of Manning	8,027.00		361,328.00	20.	808
	<u>\$ 36,944.00</u>	<u>261,149</u>	<u>\$ 1,663,138.00</u>	<u>20.</u>	<u>4,265</u>
Mannville M.H.D. No. 1					
M.D. of Minburn No. 72	\$ 13,248.00	273,289	\$ 2,208,000.00	6.	1,719
Free Hospitalization	1,040.00				
M.D. of Wainwright No. 61	2,298.00		382,970.00	6.	210
Free Hospitalization	150.00				
M.D. Eagle No. 81	70.00	1,235	11,680.00	6.	20
Village of Mannville	4,061.00	240	676,817.00	6.	584
Village of Minburn	520.00		136,120.00	6.	150
	<u>\$ 21,405.00</u>	<u>274,764</u>	<u>\$ 3,415,587.00</u>	<u>6.</u>	<u>2,683</u>
Mayerthorpe M.H.D. No. 38					
M.D. of Lac Ste. Anne No. 93	\$ 43,068.00		\$ 2,153,400.00	20.	
M.D. of Barrhead No. 106	110.00		5,470.00	20.	12
L.I.D. No. 78	20.00		980.00	20.	
L.I.D. No. 109	6,070.00		303,535.00	20.	
Village of Mayerthorpe	10,124.00	12,314	506,185.00	20.	554
	<u>\$ 59,392.00</u>	<u>296,353</u>	<u>\$ 2,969,570.00</u>	<u>20.</u>	<u>4,406</u>
Medicine Hat M.H.D. No. 59					
M.D. of Forty Mile No. 2	\$ 51,232.00	410,000	\$ 4,099,294.00	12.49	1,500
County of Warner	80.00	9,600	6,380.00	12.49	20
L.I.D. No. 11	47,601.00	904,110	3,808,764.00	12.49	4,000
L.I.D. No. 22	4,505.00	112,230	360,437.00	12.49	650
City of Medicine Hat	279,091.00		22,331,155.00	12.49	22,150
Town of Irvine	1,927.00		154,158.00	12.49	250
Town of Redcliff	15,497.00		1,239,941.00	12.49	1,800
	<u>\$399,933.00</u>	<u>1,525,940</u>	<u>\$32,000,129.00</u>	<u>12.49</u>	<u>30,370</u>
Myrnam M.H.D. No. 23					
M.D. of Eagle No. 81	\$ 27,336.00	166,542	\$ 1,708,490.00	16.	1,900
M.D. of St. Paul No. 86	530.00	9,708	33,100.00	16.	70
Village of Myrnam	7,965.00		497,810.00	16.	425
	<u>\$ 35,831.00</u>	<u>176,232</u>	<u>\$ 2,239,400.00</u>	<u>16.</u>	<u>2,395</u>
Olds M.H.D. No. 26					
M.D. of Mountain View No. 49	\$ 34,998.00	350,879	\$ 4,666,531.00	7.5	5,800
M.D. of Kneehill No. 48	5,311.00	37,440	708,100.00	7.5	1,000
L.I.D. No. 50	31.00	1,281	4,110.00	7.5	
Town of Olds	16,268.00	607	2,169,070.00	7.5	1,967
Town of Sundre	4,461.00	350	594,830.00	7.5	900
	<u>\$ 61,069.00</u>	<u>390,557</u>	<u>\$ 8,142,641.00</u>	<u>7.5</u>	<u>9,667</u>
Oyen M.H.D. No. 35					
M.D. of Acadia Valley No. 52..	\$ 2,717.60	55,849	\$ 1,090,720.00		160
Special Areas	19,318.90	688,657	1,640,493.00		1,666
Village of Oyen	5,003.50	14,196	491,660.00		700
	<u>\$ 27,040.00</u>	<u>744,647</u>	<u>\$ 3,222,873.00</u>	<u>8.4</u>	<u>2,526</u>
Peace River M.H.D. No. 21					
M.D. of Peace River No. 135....	3,782.00	42,800	\$ 472,660.00	8.	590
M.D. of Smoky River	370.00	6,386	46,250.00	8.	90
L.I.D. No. 131	10,508.00	200,696	1,313,461.00	8.	2,394
L.I.D. No. 138	2,331.00	227,605	291,481.00	8.	
Town of Peace River	17,463.00		2,182,880.00	8.	1,977
	<u>\$ 34,454.00</u>	<u>477,310</u>	<u>\$ 4,306,732.00</u>	<u>8.</u>	<u>6,041</u>

TABLE 14 — 1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Ponoka M.H.D. No. 37					
County of Ponoka No. 3	\$ 36,931.00	335,759	\$ 5,295,145.00	7.	5,275
M.D. of Camrose No. 63	2,570.00	30,720	368,470.00	7.	325
Town of Ponoka	24,890.00	1,399	3,568,775.00	7.	3,373
	<u>\$ 64,391.00</u>	<u>367,878</u>	<u>\$ 9,232,390.00</u>	<u>7.</u>	<u>8,973</u>
Provost M.H.D. No. 12					
M.D. of Provost No. 52	\$ 30,851.00		\$ 3,427,880.00	9.	
M.D. of Wainwright No. 61	2,428.00	41,168	269,730.00	9.	
Special Areas No. 3	876.00		97,315.00	9.	
Town of Provost	8,554.00	399	950,490.00	9.	1,098
	<u>\$ 42,709.00</u>	<u>537,449</u>	<u>\$ 4,745,415.00</u>	<u>9.</u>	<u>3,932</u>
Raymond M.H.D. No. 31					
M.D. of Warner County	\$ 12,720.00	161,632.3	\$ 2,624,742.00	4.85	2,200
M.D. of Lethbridge	130.00	1,864.6	26,940.00	4.85	
M.D. of Cardston	1,700.00	27,623.8	352,160.00	4.85	
Town of Raymond	8,400.00		1,733,132.00	4.85	2,400
Village of Stirling	1,050.00		216,570.00	4.85	700
	<u>\$ 24,000.00</u>	<u>191,120.7</u>	<u>\$ 4,953,544.00</u>	<u>4.85</u>	<u>5,300</u>
Red Deer M.H.D. No. 15					
M.D. of Red Deer No. 55	\$ 46,897.00	272,549	\$ 4,900,310.00	9.5	5,300
M.D. of Lacombe No. 64	6,388.00	47,111	667,350.00	9.5	1,100
City of Red Deer	112,683.00	2,816	11,772,586.00	9.5	12,800
Town of Sylvan Lake	13,685.00	531	1,429,230.00	9.5	1,300
Village of Penhold	2,329.00	640	242,545.00	9.5	260
	<u>\$181,982.00</u>	<u>323,647</u>	<u>\$19,012,021.00</u>	<u>9.5</u>	<u>20,760</u>
Rimbey M.H.D. No. 52					
County of Ponoka No. 3	\$ 26,905.00		\$ 2,989,518.00	9.	
M.D. of Lacombe No. 64	803.00		89,330.00	9.	
L.I.D. No. 65	514.00		57,190.00	9.	
Town of Rimbey	8,547.00		854,720.00	10.	
	<u>\$ 36,769.00</u>	<u>164,036</u>	<u>\$ 3,990,758.00</u>	<u>9.2</u>	<u>3,875</u>
Rocky Mountain House M.H.D. No. 49					
L.I.D. No. 65	\$ 11,901.00		\$ 1,831,818.00	6.5	
Town of Rocky Mountain House	7,336.00		1,048,500.00	7.	
Village of Caroline	877.00		13,560.00	6.5	320
	<u>\$ 20,114.00</u>	<u>289,273</u>	<u>\$ 1,893,878.00</u>	<u>6.6</u>	<u>5,770</u>
Smoky Lake M.H.D. No. 73					
M.D. of Smoky Lake No. 89	\$ 18,520.00	271,770	\$ 2,645,675.00	7.	3,840
Village of Smoky Lake	3,449.00		492,670.00	7.	556
Village of Warspite	1,162.00		166,010.00	7.	168
	<u>\$ 23,131.00</u>	<u>271,770</u>	<u>\$ 3,304,355.00</u>	<u>7.</u>	<u>4,564</u>
Spirit River M.H.D. No. 60					
M.D. No. 133	\$ 10,280.00	142,165	\$ 1,581,585.00	6.5	2,075
L.I.D. No. 132	5,594.00	149,599	860,643.00	6.5	1,169
L.I.D. No. 134	7,478.00	252,198	1,150,493.00	6.5	2,175
Town of Spirit River	4,211.00		647,960.00	6.5	989
Village of Rycroft	2,606.00		401,059.00	6.5	574
	<u>\$ 30,169.00</u>	<u>543,962</u>	<u>\$ 4,641,743.00</u>	<u>6.5</u>	<u>6,982</u>
Stettler M.H.D. No. 20					
County of Stettler No. 6	\$ 52,259.00		\$19,501,690.00	5.5	66
M.D. of Paintearth No. 53	1,342.00		243,880.00	5.5	
M.D. of Starland No. 47	769.00	18,470	139,850.00	5.5	
M.D. of Camrose No. 63	1,486.00		270,060.00	5.5	
Town of Stettler	21,430.00		3,896,191.00	5.5	3,318
Village of Big Valley	1,938.00		352,330.00	5.5	464
Village of Donalda	1,649.00		299,849.00	5.5	260
Village of Gadsby	640.00		116,490.00	5.5	110
Village of Botha	598.00		108,820.00	5.5	100
	<u>\$ 82,111.00</u>	<u>871,614</u>	<u>\$14,929,190.00</u>	<u>5.5</u>	<u>10,869</u>

TABLE 14—1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
St. Paul M.H.D. No. 36					
M.D. of St. Paul	\$ 11,512.58		\$ 3,016,495.00	5.	7,000
M.D. of Eagle	35.56		8,640.00	6.	10
M.D. of Bonnyville	1,338.34		23,850.90	6.	1,800
L.I.D. No. 101	81.16		202.90	6.	160
Town of St. Paul	7,192.53		16,060.50	6.	2,100
	<u>\$ 20,159.07</u>	<u>369,139</u>	<u>\$ 3,035,230.00</u>	<u>6.</u>	<u>11,070</u>
Taber M.H.D. No. 27					
M.D. of Taber No. 14	\$ 62,478.00		\$ 5,679,855.00	11.	3,600
M.D. of Forty Mile No. 2	1,173.00		106,700.00	11.	16
M.D. of Lethbridge No. 25	22.00		2,070.00	11.	12
County of Warner No. 5	805.00		73,190.00	11.	
Town of Taber	68,557.00		6,232,510.00	11.	3,800
Village of Grassy Lake	2,853.00		259,416.00	11.	200
Village of Vauxhall	6,478.00		588,950.00	11.	450
	<u>\$142,366.00</u>	<u>431,059</u>	<u>\$12,942,691.00</u>	<u>11.</u>	<u>8,078</u>
Tofield M.H.D. No. 47					
M.D. of Beaver No. 73	\$ 20,741.20	186,632	\$ 2,592,650.00	8.	1,950
M.D. of Strathcona No. 83	1,756.63	26,500	204,579.00	8.	400
M.D. of Camrose No. 68	1,580.00		197,500.00	8.	250
Town of Tofield	6,176.00		772,000.00	8.	771
Village of Ryley	3,784.56		473,070.00	8.	490
	<u>\$ 34,038.39</u>	<u>213,132</u>	<u>\$ 4,239,799.00</u>	<u>8.</u>	<u>3,861</u>
Three Hills M.H.D. No. 45					
M.D. of Kneehill No. 48	\$ 26,661.00	249,000	\$ 3,808,784.00	7.	1,700
M.D. of Mountain View No. 49	349.00		49,850.00	7.	
Town of Three Hills	8,736.00	211	1,248,030.00	7.	1,200
	<u>\$ 35,746.00</u>	<u>249,211</u>	<u>\$ 5,106,664.00</u>	<u>7.</u>	<u>2,900</u>
Trochu M.H.D. No. 56					
M.D. of Kneehill No. 48	\$ 9,046.00	159,000	\$ 2,258,358.00	4.	1,400
Village of Trochu	2,954.00	85	726,315.00	4.	700
	<u>\$ 12,000.00</u>	<u>159,085</u>	<u>\$ 2,984,673.00</u>	<u>4.</u>	<u>2,100</u>
Turner Valley M.H.D. No. 66					
M.D. of Foothills No. 31	\$ 22,665.00		\$ 4,120,000.00	5.5	1,200
Town of Black Diamond	3,389.00		616,195.00	5.5	984
Village of Turner Valley	1,926.00		350,335.00	5.5	673
	<u>\$ 27,980.00</u>	<u>663,600</u>	<u>\$ 5,087,430.00</u>	<u>5.5</u>	<u>2,857</u>
Two Hills M.H.D. No. 42					
M.D. of Eagle No. 81	\$ 24,462.00	222,563	\$ 2,446,165.00	10.	3,480
M.D. of Minburn No. 72	697.00	7,896	69,750.00	10.	122
M.D. of St. Paul No. 86	130.00	2,106	13,060.00	10.	35
Town of Two Hills	7,870.00	126	787,010.00	10.	782
	<u>\$ 32,500.00</u>	<u>232,691</u>	<u>\$ 3,315,985.00</u>	<u>10.</u>	<u>4,419</u>
Vegreville M.H.D. No. 34					
M.D. of Beaver No. 73	\$ 5,736.00	97,740	\$ 1,274,790.00	4.5	1,100
M.D. of Eagle No. 81	2,160.00	33,470	479,955.00	4.5	360
M.D. of Minburn No. 72	16,952.00	206,624	3,767,145.00	4.5	2,794
M.D. of Lamont	345.00	5,121	76,715.00	4.5	90
Town of Vegreville	13,786.00	1,280	3,063,664.00	4.5	2,694
Village of Lavoy	604.00	40	134,135.00	4.5	124
	<u>\$ 39,583.00</u>	<u>344,275</u>	<u>\$ 8,796,404.00</u>	<u>4.5</u>	<u>7,162</u>
Vermilion M.H.D. No. 2					
M.D. of Eagle	\$ 5,196.00	64,226	\$ 663,600.00	7.83	740
M.D. of Minburn	7,580.00	121,655	968,160.00	7.83	800
M.D. of Vermilion River	22,874.00	232,429	2,722,920.00	7.83	3,000
Town of Vermilion	20,477.00	1,222	2,502,185.00	8.3	2,408
M.D. of Wainwright	21.00	638	2,800.00	7.83	
Village of Derwent	2,067.00	545	264,000.00	7.83	283
	<u>\$ 58,215.00</u>	<u>420,224</u>	<u>\$ 7,123,605.00</u>	<u>7.8</u>	<u>7,321</u>

TABLE 14 — 1957 TAX REQUISITION (Continued)

Contributing Units	Requisition	Acreage	Assessed Value	Mill Rate	Population
Viking M.H.D. No. 10					
M.D. of Beaver	\$ 32,459.00	386,776	\$ 3,487,180.00	9.3	2,900
M.D. of Minburn	2,831.00	36,136	304,230.00	9.3	
M.D. of Flagstaff	1,073.00	13,360	115,290.00	9.3	
M.D. of Wainwright	2,761.00	22,872	286,722.00	9.3	
Town of Viking	8,376.00	262	899,986.00	9.3	900
	<u>\$ 47,500.00</u>	<u>461,406</u>	<u>\$ 5,103,408.00</u>	<u>9.3</u>	<u>4,475</u>
Vulcan M.H.D. No. 19					
County of Vulcan No. 2	\$ 35,302.12		\$ 8,825,530.00	4.	
M.D. of Willow Creek	62.48		15,620.00	4.	
Town of Vulcan	5,464.50		1,366,130.00	4.	
	<u>\$ 40,829.12</u>	<u>605,050</u>	<u>\$10,207,280.00</u>	<u>4.</u>	<u>5,095</u>
Wainwright M.H.D. No. 17					
M.D. of Wainwright	\$ 27,773.70	749,427	\$ 5,049,763.00	5.5	6,500
M.D. of Provost	258.75	8,000	47,040.00	5.5	40
M.D. of Vermilion River	81.25	2,225	14,770.00	5.5	11
M.D. of Minburn	81.35	2,300	14,790.00	5.5	11
Town of Wainwright	11,953.40		2,390,683.00	5.	2,635
Village of Edgerton	1,950.25		354,590.00	5.5	292
Village of Chauvin	2,019.80		367,235.00	5.5	348
	<u>\$ 44,118.00</u>	<u>761,752</u>	<u>\$ 8,238,871.00</u>	<u>5.5</u>	<u>9,050</u>
Willingdon M.H.D. No. 64					
M.D. of Lamont	\$ 732.00	11,675	\$ 209,400.00	3.5	170
M.D. of Eagle	5,438.00	119,140	1,553,840.00	3.5	1,770
Village of Willingdon	1,628.00		465,190.00	3.5	500
Village of Hairy Hill	724.00		207,120.00	3.5	250
	<u>\$ 8,522.00</u>	<u>130,815</u>	<u>\$ 2,435,550.00</u>	<u>3.5</u>	<u>2,690</u>

TABLE 15

HOSPITAL DAYS AND PATIENTS UNDER CARE, 1947-1957

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
ADULTS AND CHILDREN											
Days (In 1,000's)	1,377	1,408	1,437	1,468	1,559	1,614	1,732	1,826	1,886	1,920	1,989
Cases (In 1,000's)	139	142	159	163	171	186	199	207	214	222	233
Average Length of Stay	9.1	9.8	9.2	8.8	9.0	9.0	8.8	8.9	8.9	8.9	8.7
Average in Hospital Daily	3,773	3,858	3,936	4,022	4,269	4,422	4,744	5,001	5,166	5,259	5,449
Occupancy	65.3	78.4	84.7	80.8	77.9	80.3	74.4	76.4	75.4	75.3	77.5
NEWBORN											
Days (In 1,000's)	219	202	211	216	220	231	247	259	260	259	261
Cases (In 1,000's)	23	23	24	25	26	28	31	33	34	34	35
Average Length of Stay	9.7	9.2	9.1	8.9	8.6	8.5	8.2	8.0	7.9	7.7	7.6
Stillbirths	373	349	388	329	363	367	447	423	409	389	386
Births in Approved Hospitals	93.1	96.6	97.2	97.9	95.3	95.0	96.0	96.4	96.1	96.2	96.4

TABLE 16

HOSPITALIZATION ADMISSIONS, DISCHARGES AND DAYS PER 1,000 POPULATION, 1947-1957

(EXCLUDING NEWBORN)

Year	Census or Inter-Censal Estimate of Alberta Population	Cases Per 1,000 Population		Days Per 1,000 Population	
		Admitted	Discharged	For Discharged Cases	Total Days of Care During Year
1947	822,000	165	165	1,680	1,710
1948	846,000	171	170	1,666	1,665
1949	871,000	179	179	1,642	1,650
1950	895,000	178	178	1,623	1,640
1951	939,501*	178	177	1,634	1,659
1952	970,000	188	188	1,707	1,664
1953	1,002,000	194	194	1,712	1,728
1954	1,039,000	195	195	1,743	1,757
1955	1,066,000	197	197	1,753	1,769
1956	1,123,116*	193	193	1,714	1,709
1957	1,160,000	197	197	1,711	1,714

*Federal census of Alberta. The inter-censal estimates are by the Dominion Bureau of Statistics.

TABLE 17 — MONTHLY MOVEMENT OF PATIENTS, 1957
(Excluding D.V.A., Division, University Hospital)

	January	February	March	April	May	June	July	August	September	October	November	December	Year
ADULTS AND CHILDREN													
In at Beginning	4,318	5,711	5,627	5,454	5,477	5,232	4,587	4,892	4,466	5,338	5,702	5,149	4,318
Admission	19,472	17,493	19,788	19,805	19,219	18,177	18,106	18,727	18,971	20,959	18,929	18,013	227,015
Total Under Care	23,790	23,204	25,415	25,259	24,656	23,409	23,693	23,619	22,393	26,297	23,631	23,162	231,333
Discharges	17,778	17,323	19,664	19,481	19,105	18,608	18,511	18,871	17,354	19,470	18,427	18,272	223,063
Deaths	301	254	297	301	289	274	280	283	311	425	355	304	3,684
In at the End	5,711	5,627	5,454	5,477	5,232	4,587	4,892	4,466	5,338	5,702	5,149	4,586	4,586
NEWBORN													
In at the Beginning	593	710	711	700	754	733	671	778	694	773	733	663	593
Live Births	2,640	2,534	2,914	2,886	3,048	2,908	3,083	2,934	2,876	2,652	2,703	2,782	34,372
Total Under Care	3,233	3,244	3,625	3,586	3,802	3,641	3,764	3,712	3,572	3,425	3,436	3,445	34,965
Discharges	2,479	2,469	2,876	2,863	3,032	2,930	2,946	2,972	2,862	2,945	2,796	2,777	33,858
Deaths	44	34	49	39	37	37	36	48	34	47	37	38	33,477
In at the End	710	711	700	754	733	671	778	694	773	733	663	630	630
STILLBIRTHS	28	27	28	37	37	32	29	40	35	30	33	30	386

TABLE 18 — PATIENT DAYS BY HOSPITAL GROUP AND MONTH, 1957
(Excluding D.V.A., Division, University Hospital)

Hospital Group	January	February	March	April	May	June	July	August	September	October	November	December	Year
ADULTS AND CHILDREN													
Group A	77,935	73,145	80,296	76,795	78,163	74,184	75,277	73,715	73,213	79,825	78,735	73,868	915,021
Group B	26,791	25,102	27,302	26,096	23,891	24,790	22,579	22,329	22,709	25,051	25,610	23,339	298,512
Group C	45,913	42,024	47,495	43,522	43,594	39,100	37,508	39,440	38,138	47,002	44,564	40,353	510,109
Group D	16,352	15,062	17,081	15,749	15,354	14,292	13,996	14,277	13,838	17,490	15,718	14,698	183,873
Group E	2,052	1,991	2,099	1,986	1,887	1,821	2,213	1,902	1,930	2,419	2,073	2,029	24,402
Provincial Total	169,043	157,324	174,133	164,018	162,891	154,433	153,490	151,863	150,948	172,787	166,700	154,287	1,931,917
NEWBORN													
Group A	10,525	10,267	11,580	11,358	11,758	11,224	11,892	11,355	11,497	12,017	11,053	10,905	135,431
Group B	2,544	2,548	2,571	2,702	2,754	2,580	2,682	2,789	2,824	2,709	2,696	2,339	31,738
Group C	5,604	4,974	5,636	5,510	6,189	5,718	5,887	6,133	5,685	5,735	5,152	4,957	67,180
Group D	1,728	1,719	2,108	2,224	2,163	1,860	2,020	1,914	2,066	1,846	1,803	2,132	23,583
Group E	312	223	269	224	220	218	351	166	246	293	308	196	3,026
Provincial Total	20,713	19,731	22,164	22,018	23,084	21,800	22,832	22,357	22,318	22,600	21,012	20,529	260,958

TABLE 19

DISTRIBUTION OF CASES AND PATIENT DAYS OF DISCHARGED PATIENTS
BY LENGTH OF STAY IN DAYS—1957

(Excluding D.V.A. Division, University Hospital, and Newborn)

Length of Stay in Days	CASES		DAYS		CUMULATIVE CASES		CUMULATIVE DAYS	
	Number	%	Number	%	Number	%	Number	%
1 - 10	182,682	80.6	875,844	45.2	182,682	80.6	875,844	45.2
11 - 20	29,369	13.0	415,546	21.5	212,051	93.6	1,291,390	66.7
21 - 30	7,520	3.3	185,013	9.6	219,571	96.9	1,476,403	76.3
31 - 60	5,209	2.3	211,479	10.9	224,780	99.2	1,687,882	87.2
61 - 90	1,026	0.4	74,565	3.8	225,806	99.6	1,762,447	91.0
91+	941	0.4	173,260	9.0	226,747	100.0	1,935,707	100.0

TABLE 20

HOSPITALIZATION OF PATIENTS BY AGE AND LENGTH OF STAY

PATIENT AGE	LENGTH OF STAY									Total
	1	2	3	4-10	11-20	21-30	31-60	61-90	91+	
0 - 1										
Cases	595	621	901	4,350	1,260	299	183	36	16	8,261
Days	595	1,242	2,703	27,673	17,691	7,445	7,445	2,621	2,585	70,000
1 - 4										
Cases	2,045	3,825	2,225	7,420	1,289	269	216	32	43	17,364
Days	2,045	7,650	6,675	44,582	17,890	6,613	8,921	2,273	10,116	106,766
5 - 9										
Cases	1,991	5,378	2,406	5,240	835	185	139	56	58	16,288
Days	1,991	10,756	7,218	31,283	11,781	4,488	5,760	4,043	14,457	91,777
10 - 19										
Cases	2,796	3,786	3,207	11,544	1,688	330	215	39	92	23,697
Days	2,796	7,572	9,621	72,114	23,496	8,105	8,842	2,917	21,929	157,392
20 - 29										
Cases	3,693	4,507	4,169	30,449	3,351	532	280	73	68	47,122
Days	3,693	9,014	12,507	200,830	45,078	13,040	11,306	5,357	17,234	318,059
30 - 39										
Cases	2,774	3,326	3,314	19,291	3,724	665	380	62	62	33,598
Days	2,774	6,652	9,942	128,089	51,208	16,272	15,189	4,446	13,125	247,697
40 - 44										
Cases	1,080	1,291	1,303	5,457	1,863	378	235	36	42	11,685
Days	1,080	2,582	3,909	35,545	26,266	9,232	9,451	2,634	6,632	97,331
45 - 49										
Cases	880	1,065	1,116	4,482	1,809	439	280	31	28	10,130
Days	880	2,130	3,348	28,971	25,605	10,801	11,091	2,180	5,763	90,769
50 - 54										
Cases	690	895	992	4,081	1,819	471	261	48	37	9,293
Days	690	1,790	2,976	26,324	25,870	11,581	10,243	3,509	5,780	88,740
55 - 59										
Cases	563	708	756	3,712	1,700	489	367	65	44	8,404
Days	563	1,416	2,268	24,522	24,323	12,086	14,729	4,725	6,765	91,399
60 - 64										
Cases	487	577	677	3,592	1,836	580	423	83	48	8,304
Days	487	1,154	2,031	23,461	26,548	14,212	17,232	6,132	6,596	97,874
65 - 69										
Cases	538	626	627	3,881	2,367	783	586	109	68	9,584
Days	538	1,252	1,881	26,075	34,409	19,379	23,835	7,812	11,015	126,169
70 - 74										
Cases	457	492	553	3,913	2,318	830	555	113	104	9,334
Days	457	984	1,659	26,503	33,791	20,462	22,938	8,229	14,767	129,765
75 and over										
Cases	596	622	713	5,139	3,477	1,258	1,084	242	228	13,361
Days	596	1,244	2,139	35,128	51,098	31,009	44,286	17,600	35,959	219,111
No Age										
Cases	43	33	25	167	33	12	5	1	3	322
Days	43	66	75	1,060	491	288	211	87	537	2,858
Total										
Cases	19,228	27,752	22,984	112,718	29,369	7,520	5,209	1,026	941	226,747
Days	19,228	55,504	68,952	732,160	415,546	185,013	211,479	74,565	173,260	1,935,707

TABLE 21

PERCENTAGE DISTRIBUTION OF CASES AND DAYS OF DISCHARGED PATIENTS
AND THEIR AVERAGE LENGTH OF STAY BY AGE GROUP AND SEX—1957
(Excluding D.V.A. Division, University Hospital, and Newborn)

AGE GROUP	Percent of Cases			Percent of Days			Average Length of Stay		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0 - 4	11.3	6.6	4.7	9.1	5.1	4.0	6.9	6.8	7.0
5 - 9	7.2	3.8	3.4	4.8	2.5	2.3	5.6	5.6	5.6
10 - 19	10.4	4.2	6.2	8.1	3.4	4.7	6.6	7.0	6.4
20 - 29	20.8	4.3	16.5	16.4	4.0	12.4	6.7	8.0	6.4
30 - 39	14.8	3.9	10.9	12.8	3.9	8.9	7.4	8.5	7.0
40 - 49	9.7	3.8	5.9	9.7	4.0	5.7	8.6	9.1	8.3
50 - 59	7.8	3.7	4.1	9.3	4.7	4.6	10.1	10.6	9.8
60 - 69	7.9	4.1	3.8	11.6	6.0	5.6	12.5	12.4	12.6
70 and over	10.0	5.5	4.5	18.0	9.5	8.5	15.4	14.8	16.1
N. A.	0.1	0.05	0.05	0.2	0.06	0.1	8.9	10.8	7.7

TABLE 22

DISCHARGED PATIENTS AND THEIR AVERAGE LENGTH OF STAY BY AGE GROUPS,
1951-1957
(Excluding D.V.A. Division, University Hospital, and Newborn)

AGE GROUP	1951*		1952*		1953		1954		1955		1956		1957	
	Patients Discharged or Deceased	Average Length of Stay	Patients Discharged or Deceased	Average Length of Stay	Patients Discharged or Deceased	Average Length of Stay	Patients Discharged or Deceased	Average Length of Stay	Patients Discharged or Deceased	Average Length of Stay	Patients Discharged or Deceased	Average Length of Stay	Patients Discharged or Deceased	Average Length of Stay
Less than 1														
1 - 4	17,118	6.2	18,148	6.2	19,963	7.1	20,938	7.4	21,885	7.0	24,256	7.2	8,261	8.5
5 - 9	11,887	5.4	12,598	5.5	13,996	6.1	13,682	6.0	14,019	5.9	14,358	5.6	17,364	6.1
10 - 19	17,805	6.7	19,700	6.5	20,246	7.2	20,680	6.9	20,623	6.8	21,356	6.9	16,288	5.6
20 - 29	38,355	7.0	41,141	6.8	44,210	7.0	45,539	7.0	46,089	6.9	46,261	6.9	23,697	6.6
30 - 39	25,251	7.7	27,902	7.4	29,881	7.4	31,041	7.5	32,372	7.4	32,724	7.4	47,122	6.7
40 - 44	8,335	8.5	9,113	8.5	9,487	8.3	10,247	8.1	10,766	8.3	11,112	8.1	33,598	7.4
45 - 49	7,345	9.7	8,003	9.0	8,546	8.9	8,844	9.1	9,250	9.1	9,726	9.1	11,685	8.3
50 - 54	6,825	10.7	7,561	10.0	8,032	9.7	8,419	10.1	8,553	10.0	8,752	9.9	10,130	9.0
55 - 59	6,106	11.0	6,511	10.9	6,774	11.1	6,854	11.3	7,674	11.0	7,918	11.0	9,293	9.5
60 - 64	6,481	12.9	6,908	12.8	7,297	12.5	7,309	12.5	7,354	11.9	7,929	12.2	8,404	10.9
65 - 69	6,154	13.7	7,124	13.4	7,841	13.5	8,475	13.5	9,114	13.3	9,013	13.2	9,584	13.2
70 - 74	5,925	15.3	6,772	14.7	7,411	15.3	8,034	15.1	8,364	15.1	9,110	14.8	9,334	13.9
75 and over	7,299	17.1	8,214	16.4	9,318	16.8	10,426	16.5	11,859	17.8	12,667	17.1	13,361	16.4
Not Stated	80	7.9	64	5.6	154	7.6	111	9.5	233	7.5	243	11.1	322	8.9
Total	164,966	8.6	179,759	8.4	193,156	8.7	200,599	8.8	208,155	8.8	215,425	8.8	226,747	8.5

*Does not include Polio

TABLE 23—HOSPITALIZATION BY TYPE OF PATIENTS AND DAYS OF STAY, 1957
(Excluding D.V.A., Division, University Hospital and Newborn)

PATIENT TYPE	LENGTH OF STAY IN DAYS										Total
	1	2	3	4-10	11-20	21-30	31-60	61-90	91 +		
STANDARD WARD											
Cases	5	7	5	15	1					33	
Days	5	14	15	71	12					117	
STANDARD WARD AND SPECIAL SERVICES											
Cases	11,439	18,086	14,418	50,395	16,075	4,089	2,800	462	364	118,128	
Days	11,439	36,172	43,254	316,844	228,335	100,702	112,906	33,489	55,404	938,545	
GENERAL*											
Cases	6,012	7,509	6,267	19,393	5,606	1,396	930	227	171	47,511	
Days	6,012	15,018	18,801	120,384	79,377	34,330	37,911	16,479	35,795	364,107	
MATERNITY											
Cases	15	34	129	29,903	1,649	53	20	1		31,804	
Days	15	68	387	209,148	20,066	1,255	786	64		231,789	
OLD AGE PENSION											
Cases	599	693	878	6,275	4,096	1,468	1,087	231	195	15,522	
Days	599	1,386	2,634	42,690	60,110	36,153	44,349	16,898	25,922	230,741	
MOTHER'S ALLOWANCE											
Cases	98	182	148	502	163	25	14	4	2	1,138	
Days	98	364	451	3,085	2,272	630	574	302	209	7,985	
BLIND PENSION											
Cases	17	20	23	154	98	35	15	6	8	376	
Days	17	40	69	1,014	1,424	869	613	438	1,492	5,976	
WIDOW'S ALLOWANCE											
Cases	10	14	24	149	87	30	23	6	3	346	
Days	10	28	72	1,006	1,256	738	943	401	466	4,920	
POLIO											
Cases	10	12	4	50	81	33	66	50	162	468	
Days	10	24	12	373	1,213	804	2,942	3,708	45,947	55,033	
INDIANS											
Cases	186	223	290	1,594	381	92	71	7	9	2,853	
Days	186	446	870	10,214	5,428	2,257	2,919	490	3,220	26,030	
OTHERS†											
Cases	797	924	756	3,995	903	226	141	29	27	7,798	
Days	797	1,848	2,268	25,271	12,718	5,503	5,825	2,095	4,805	61,130	
PSYCHIATRIC											
Cases	40	48	44	291	229	73	42	3		770	
Days	40	96	132	2,047	3,335	1,772	1,711	201		9,334	
TOTAL											
Cases	19,228	27,752	22,984	112,718	29,369	7,520	5,209	1,026	941	226,747	
Days	19,228	55,504	68,952	732,160	415,546	185,013	211,479	74,565	173,260	1,935,707	

*Self-pay and insured primarily by other than Provincial Government Plan.

†Non-residents, boarders and recipients of Veterans' Allowance.

TABLE 24

PERCENTAGE DISTRIBUTION OF PATIENTS ACCORDING TO TYPE OF BENEFITS,
1957

Provincial-Municipal Hospitalization Plan .....	.....	52.1
(a) Standard Ward Care Only	0.01	.....
(b) Standard Ward and Special Services	52.1	.....
Maternity Hospitalization Benefits .....	.....	14.0
Social Service Recipients Hospitalization Benefits .....	.....	7.7
(a) Old Age Pension Group	6.8	.....
(b) Mothers' Allowance	0.5	.....
(c) Blind Pension	0.2	.....
(d) Widows' Allowance	0.2	.....
Polio and Orthopaedic Benefits .....	.....	0.2
Psychiatric (in General Hospitals) .....	.....	0.3
Residents not purchasing contracts .....	.....	21.0
Indians (in General Hospitals) .....	.....	1.3
Others* .....	.....	3.4
TOTAL .....	.....	100.0

*Non-residents, boarders and recipients of Veterans' Allowance.

TABLE 25

AVERAGE LENGTH OF STAY IN HOSPITAL OF DISCHARGED PATIENTS
BY TYPE OF BENEFIT, 1951-1957

	1951	1952	1953	1954	1955	1956	1957
Type of Benefits	AVERAGE LENGTH OF STAY IN DAYS						
PROVINCIAL-MUNICIPAL Hospitalization Benefits							
(a) Standard Ward Only	7.6	7.6	7.6	7.9	8.2	7.9	3.5
(b) Standard Ward and Special Services	■	■	8.1	7.8	7.9	7.9	7.9
Maternity Hospitalization	8.4	8.2	7.9	7.8	7.6	7.5	7.3
Old Age Benefits	16.2	15.9	16.2	15.7	16.4	15.4	14.9
Mothers' Allowance	7.5	6.9	7.6	7.0	7.1	6.9	7.0
Blind Pension	14.8	13.5	14.4	15.8	14.8	17.1	15.9
Widows' Allowance	■	10.5	12.2	11.9	11.4	12.5	14.2
Psychiatric	■	■	■	■	12.3	10.7	12.1
Indian Affairs	■	■	11.7	10.8	13.4	10.6	9.1
General†	8.0	7.8	7.6	8.0	7.7	7.9	7.7
Others**	12.1	10.7	9.2	9.0	9.1	8.6	7.8

†Self-pay and insured primarily by other than Provincial Government plans.

**Excluding Polio and Orthopaedic patients; it includes non-residents, boarders and recipients of Veterans' Allowance.

*Not Available

TABLE 26

UTILIZATION OF HOSPITAL SERVICES UNDER THE PROVINCIAL MUNICIPAL
HOSPITALIZATION PROGRAM, 1951-1957

Year	Days of Patients Discharged or Died	Patients Discharged or Died	Average Days of Stay	% of Total Hospital Days
1951		357,321		20.0
1952		500,006		31.4
1953		660,468		39.3
Standard Ward Care	553,666		7.6	33.0
Complete Care*	106,802	72,372	8.1	6.3
1954		721,566		40.9
Standard Ward Care	353,744		7.9	20.1
Complete Care	367,822	44,817	7.8	20.8
1955		791,767		43.3
Standard Ward Care	193,093		8.2	10.6
Complete Care	598,674	23,426	7.9	32.7
1956		849,283		45.1
Standard Ward Care	1,338		7.9	0.1
Complete Care	847,945	170	7.9	45.0
1957		938,662		52.1
Standard Ward Care	117		3.5	0.01
Complete Care	938,545	33	7.9	52.1

*Six months only. Special Services benefits were added to the Provincial Municipal Hospitalization Program effective July 1st, 1953.

TABLE 27

NUMBER OF SOCIAL SERVICE RECIPIENTS AS AT DECEMBER 31, 1957

	Recipients	Spouses	Dependents and Children	Total
Old Age Security	19,514	2,150	346	22,010
Old Age Assistance	5,327	1,093	326	6,746
Hospital Treatment Services	524	.....	.....	524
Blind Pension	399	117	140	656
Mothers' Allowance	1,842	.....	4,402	6,244
Widows' Allowance	783	.....	6	789
TOTAL	28,389	3,360	5,220	36,969

TABLE 28

HOSPITAL UTILIZATION OF SOCIAL SERVICE RECIPIENTS AND THEIR AVERAGE LENGTH OF STAY BY GROUP, 1952-1957

Year	Average Eligible	Number Hospitalized	Number Hospitalized as % of Eligible	Average Stay
TOTAL				
1952	30,750	12,100	39.3	15.2
1953	32,757	13,921	42.5	15.5
1954	33,765	15,087	44.7	15.0
1955	35,623	16,418	46.1	15.6
1956	36,533	17,119	46.9	14.8
1957	36,620	17,382	47.5	14.4
OLD AGE GROUP				
1952	24,831	10,869	43.7	15.9
1953	26,348	12,468	47.3	16.2
1954	26,987	13,410	49.7	15.7
1955	28,299	14,640	51.7	16.4
1956	28,974	15,399	53.2	15.4
1957	29,031	15,522	53.5	14.9
MOTHERS' ALLOWANCE				
1952	4,981	921	18.5	6.9
1953	5,189	963	18.6	7.6
1954	5,497	1,061	19.3	7.0
1955	5,954	1,126	18.9	7.1
1956	6,141	1,117	18.2	6.9
1957	6,172	1,138	18.4	7.0
BLIND PENSION				
1952	750	273	36.4	13.5
1953	645	284	44.0	14.4
1954	599	293	48.9	15.8
1955	623	315	50.6	14.8
1956	622	297	47.8	17.1
1957	646	376	58.2	15.9
WIDOWS' ALLOWANCE				
1952	188	37	19.7	10.5
1953	575	206	35.8	12.2
1954	682	323	47.4	11.9
1955	747	337	45.1	11.4
1956	796	306	38.4	12.5
1957	771	346	44.9	14.2

TABLE 29 — PATIENT DAYS AND OCCUPANCY BY HOSPITAL, 1957

HOSPITAL	PATIENT DAYS DURING 1957			PATIENT DAYS			AVERAGE STAY OF PATIENTS DISCHARGED OR DECEASED			OCCUPANCY
	PATIENT DAYS DURING 1957			PATIENT DAYS OF PATIENTS DISCHARGED OR DECEASED			AVERAGE STAY OF PATIENTS DISCHARGED OR DECEASED			
	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total	
Athabasca Municipal	11,281	1,430	12,711	11,860	1,455	13,315	7.5	7.4	5.8	73.6
Bariff Mineral Springs	10,534	842	11,376	9,325	846	10,171	7.7	7.5	7.6	68.7
Barrihead St. Joseph's	15,795	1,474	17,269	15,522	1,476	16,998	7.9	7.6	7.8	72.1
Bassano Municipal	6,223	635	6,858	6,157	643	6,800	7.4	11.1	7.6	65.6
Beaverlodge Municipal	5,185	838	6,023	4,983	854	5,837	6.1	6.5	6.2	71.0
Bentley Municipal	3,186	378	3,564	3,156	370	3,526	5.9	7.7	6.0	54.6
Berwyn Municipal	3,365	562	3,927	3,379	561	3,940	6.7	7.6	6.8	43.9
Bialmore-Crows Nest Pass Municipal	11,047	973	12,020	10,852	1,012	11,864	9.1	6.5	8.8	42.0
Bonnyville, Katherine H. Prittle	3,116	265	3,381	3,151	266	3,417	7.0	6.6	7.0	65.7
Bonnyville St. Louis	10,804	1,239	12,043	10,613	1,232	11,845	7.5	7.6	7.5	56.9
Brooks Municipal	13,400	1,931	15,331	13,577	1,916	15,493	7.0	7.8	7.1	57.4
Calgary General	191,763	29,442	221,205	192,489	29,408	221,897	9.2	6.3	8.6	80.5
Calgary General Psychiatric	5,692	.....	5,692	5,740	.....	5,740	11.4	.....	11.4	.....
Calgary Holy Cross	105,193	16,444	121,637	107,147	16,564	123,711	8.7	7.0	8.5	87.9
Calgary, Alberta Red Cross	28,330	.....	28,330	30,587	.....	30,587	128.5	.....	128.5	49.8
Calgary, Salvation Army Grace	3,556	3,683	7,239	3,530	3,654	7,184	7.5	8.8	8.1	64.9
Canmore, St. Mary's	27,108	3,742	30,850	27,378	3,765	31,143	7.2	8.4	7.3	75.8
Canmore	2,935	345	3,280	3,075	345	3,420	8.1	7.8	8.0	67.0
Cardston Municipal	7,356	1,142	8,498	7,435	1,148	8,583	5.8	5.8	5.8	84.0
Carmangay, Little Bow Municipal	2,604	92	2,696	2,115	93	2,208	8.2	7.2	8.2	51.0
Castor, Our Lady of the Rosary	7,441	748	8,189	7,413	750	8,163	5.2	8.5	5.4	81.5
Cereal Municipal	1,601	235	1,836	1,648	235	1,883	8.9	8.7	8.8	48.7
Charshelm Municipal	10,098	1,345	11,443	10,231	1,341	11,572	7.9	7.0	7.8	65.9
Coadvale Community	5,434	670	6,104	5,501	673	6,174	6.9	7.1	7.0	114.5
Cold Lake, John Nell	5,418	769	6,187	5,253	774	6,027	5.4	6.0	5.4	99.0
Consort, Municipal	4,066	624	4,690	3,656	645	4,301	7.3	9.4	7.5	50.6
Coronation Municipal	7,287	585	7,872	7,406	585	7,991	8.5	8.6	8.5	80.5
Daysland, Providence	7,321	523	7,844	7,617	516	8,133	7.2	7.9	7.2	93.7
Desmarais, St. Martin's	2,861	191	3,052	2,894	191	3,085	6.6	6.6	6.6	58.5
Devon Civic	2,264	205	2,469	2,264	197	2,461	3.7	7.6	3.8	88.6

	8,744	924	9,668	8,521	866	9,387	8.3	6.5	8.1	74.9
Didsbury Municipal	8,744	924	9,668	8,521	866	9,387	8.3	6.5	8.1	74.9
Drumheller Municipal	2,031	2,008	2,031	2,010	1,945	2,031	10.2	6.8	9.8	59.8
Edmonton Municipal	5,159	5,159	5,159	5,159	5,159	5,159	5.6	7.3	16.7	54.7
Edmonton, Beulah Home	1,789	2,967	4,350	1,789	2,967	4,350	12.9	19.4	16.7	80.5
Edmonton, General	117,568	16,401	138,449	117,568	16,401	138,449	19.5	7.8	16.7	90.7
(a) Polo*	5,252	.....	5,252	11,371	.....	11,371	19.5	.....	19.5	.....
Edmonton, Misericordia	111,317	17,657	128,974	111,302	17,588	128,890	8.9	8.3	8.8	84.7
Edmonton, Royal Alexandra	188,333	39,258	227,591	188,962	39,355	228,317	8.9	7.7	8.7	90.6
(a) Isolation**	2,166	.....	2,166	2,252	.....	2,252	7.6	.....	7.6	.....
Edmonton University	169,736	16,229	185,965	171,176	16,250	187,426	12.3	8.9	11.9	.....
(a) D.V.A.	56,980	.....	56,980	49,511	.....	49,511	25.2	.....	25.2	81.1
(b) Polo	13,411	.....	13,411	11,925	.....	11,925	88.3	.....	88.3	.....
(c) Psychiatric	4,591	.....	4,591	4,575	.....	4,575	12.4	.....	12.4	.....
Edson, St. John's	9,032	2,061	11,113	9,074	2,056	11,130	6.3	7.0	6.4	66.9
Elk Point Municipal	17,157	1,058	18,215	17,270	1,057	18,327	7.2	7.2	7.2	92.1
Elmora Municipal	2,786	391	3,177	2,761	395	3,156	8.6	9.6	8.7	47.7
Empress Municipal	3,005	631	3,636	2,864	615	3,479	8.2	9.5	8.4	35.8
Fairview Municipal	11,122	1,331	12,453	10,851	1,344	12,195	7.4	8.2	7.5	95.2
Fort Macleod Municipal	6,483	751	7,234	6,570	747	7,317	7.6	7.7	7.6	126.9
Fort McMurray, St. Gabriel's	4,341	514	4,855	4,014	498	4,512	5.5	7.9	5.7	56.6
Fort Vermilion, St. Theresa	10,200	722	10,922	11,039	683	11,722	11.6	7.6	11.2	87.3
Galtstad, St. Joseph's	8,729	634	9,363	8,669	634	9,303	6.6	10.2	6.8	59.8
Glendon Municipal	3,442	382	3,824	3,419	373	3,792	5.1	7.0	5.2	117.9
Grande Prairie Municipal	23,117	3,229	26,346	22,001	3,186	25,187	6.8	6.1	6.7	91.8
(a) Hythe Sub-Division	1,384	220	1,604	1,500	221	1,721	5.3	6.5	5.4	43.4
Hanna Municipal	12,239	1,666	13,905	12,252	1,663	13,915	8.3	8.9	8.4	79.8
Hardisty, St. Anne's	6,818	807	7,625	6,728	806	7,534	10.2	10.3	10.2	98.4
High Prairie, Providence	18,530	2,382	20,912	18,401	2,357	20,758	7.8	6.6	7.6	123.8
High River Municipal	13,369	1,650	15,019	13,420	1,677	15,097	7.5	6.8	7.4	83.2
Innisfail Municipal	3,215	1,170	4,385	3,206	1,153	4,359	6.0	6.8	6.1	77.6
Islay Municipal	5,921	92	6,013	5,901	93	6,094	7.5	10.4	8.9	70.0
Jasper, Seton	5,272	1,221	6,493	5,355	1,197	6,552	7.5	8.6	7.7	55.6
Killam General	8,186	1,121	9,307	8,136	1,116	9,252	6.4	9.8	6.6	83.1
Lac La Biche, St. Catherine's	16,392	1,493	17,885	16,432	1,613	18,045	7.0	7.8	7.1	78.8
Lacombe Municipal	14,652	2,167	16,819	14,619	2,168	16,787	7.2	7.9	7.2	80.3
Lamont, Archer Memorial	21,318	994	22,312	19,220	981	20,201	7.2	7.8	7.2	74.1
Lethbridge Municipal	55,999	7,483	63,482	55,764	7,433	63,197	9.5	8.2	9.3	79.1
Lethbridge, St. Michael's General	54,539	3,873	58,412	54,519	3,853	58,372	9.7	8.4	9.6	82.6
Lloydminster	14,899	1,745	16,644	15,051	1,759	16,810	10.1	8.1	9.8	95.7
McLennan, Sacred Heart	18,512	2,063	20,575	18,160	2,076	20,236	8.0	8.7	8.1	61.0
Magrath Municipal	4,897	397	5,294	5,754	399	6,153	8.5	6.6	8.3	76.1
Manning Municipal	4,443	1,021	5,464	4,383	1,004	5,387	5.9	9.0	6.4	70.6
Mannville Municipal	3,866	527	4,393	3,831	522	4,353	7.0	7.0	7.0	.....

DIVISION OF HOSPITAL AND MEDICAL SERVICES

TABLE 29 — PATIENT DAYS AND OCCUPANCY BY HOSPITAL, 1957 (Continued)

HOSPITAL	PATIENT DAYS						OCCUPANCY
	PATIENT DAYS DURING 1957			PATIENT DAYS OF PATIENTS DISCHARGED OR DECEASED			
	PATIENT DAYS DURING 1957		Total	PATIENT DAYS OF PATIENTS DISCHARGED OR DECEASED		Total	
	Adults and Children	Newborn		Adults and Children	Newborn		
Mayerthorpe Municipal	7,001	1,057	8,058	7,071	1,069	8,140	5.4
Medicine Hat Municipal	40,430	6,282	46,712	40,641	6,347	46,988	8.5
Mercoal Municipal	2,204	272	2,476	2,140	267	2,407	7.0
Mundare General	5,342	279	5,621	5,304	280	5,584	6.9
Myndam Municipal	4,334	375	4,709	4,567	387	4,954	56.3
Olds Municipal	8,861	1,432	10,293	8,947	1,435	10,382	59.4
Oyen Municipal	2,690	536	3,226	2,705	529	3,234	59.2
Peace River Municipal	13,843	1,871	15,714	13,705	1,895	15,600	7.4
Pincher Creek, St. Vincent's	10,211	1,442	11,653	9,786	1,449	11,235	6.5
Ponoka Municipal	10,917	1,391	12,308	10,840	1,388	12,228	7.6
Provost Municipal	5,152	646	5,798	5,256	651	5,907	6.7
Radway, St. Joseph's	4,608	585	5,193	4,634	578	5,212	7.1
Raymond Municipal	3,834	604	4,438	3,786	603	4,389	6.8
Red Deer Municipal	29,899	5,817	35,716	29,573	5,837	35,410	6.0
Rimbey Municipal	9,432	1,285	10,717	9,344	1,262	10,606	7.6
Rocky Mountain House Municipal	7,842	1,122	8,964	7,854	1,125	8,979	6.5
Smoky Lake Municipal	2,856	599	3,455	2,844	587	3,431	6.7
Spirit River, Holy Cross	14,981	1,062	16,043	14,808	1,069	15,867	5.7
Stettler Municipal	16,988	2,007	18,995	17,115	1,993	19,108	8.8
St. Paul, St. Theresa	16,384	2,585	18,969	16,340	2,564	18,904	8.3
Taber Municipal	18,010	2,711	20,721	17,712	2,697	20,409	7.8
Three Hills Municipal	5,662	958	6,620	5,580	961	6,541	6.9
Torfield Municipal	8,074	811	8,885	8,148	797	8,945	7.4
Trochu, St. Mary's	5,186	550	5,736	4,930	551	5,481	6.6
Turner Valley Municipal	6,651	431	7,082	6,787	431	7,218	71.4
Two Hills Municipal	8,284	771	9,055	8,212	778	8,990	45.8
Vegreville, St. Joseph's General	20,357	1,539	21,896	20,444	1,550	21,994	8.0
Vermilion Municipal	9,882	1,224	11,106	9,852	1,218	11,070	8.7
Viking Municipal	8,497	1,215	9,712	8,246	1,216	9,462	9.4
Vilna, Our Lady's	3,553	828	4,381	3,474	791	4,265	8.0
							6.4
							8.7
							8.4
							9.4
							8.0
							7.2
							10.3
							6.7
							7.5

Vulcan Municipal	8,482	1,086	9,568	8,493	1,076	9,569	5.8	7.8	6.0	62.8
Wainwright Municipal	12,215	1,633	13,848	12,317	1,643	13,960	7.8	7.0	7.7	69.7
Westlock, Immaculata	21,957	2,381	24,338	21,949	2,391	24,340	7.3	8.8	7.4	80.2
Wetaskiwin Community	15,942	2,546	18,488	15,826	2,538	18,364	6.2	7.2	6.3	72.8
Willingdon General	5,096	562	5,658	4,944	591	5,535	6.2	10.4	6.4	107.4
TOTAL	1,988,897	260,958	2,249,855	1,985,218	260,791	2,246,009	8.7	7.6	8.5	77.5
Less D.V.A., Psychiatric, Orthopedic and Polio Division Cases	114,256	.....	114,256	113,709	.....	113,709	34.8	.....	34.8	....
NET TOTAL	1,874,641	260,958	2,135,599	1,871,509	260,791	2,132,300	8.3	7.6	8.2	....

*9 Months only January to September.

**4 Months only January to April.

†Not available.

TABLE 30 — HOSPITAL BEDS AND MOVEMENT OF PATIENTS BY HOSPITAL, 1957
(Excluding Chronic and Domiciliary Beds)

HOSPITAL	Bed Capacity		Bed Complement As at Dec. 31/57		Patients Under Care During Year						Admissions		Discharges		Deaths		Stillbirths†		
	Beds	Bassinets	Total	Beds	Bassinets	Total	Newborn				Adults and Children		Newborn		Adults and Children				
							M	F	M	F	M	F	Total	Adults and Children	Newborn	Adults and Children		Newborn	
Athabasca Municipal	42	13	55	49	13	62	953	1,160	104	98	1,057	1,258	2,315	2,089	195	2,061	195	33	2
Barhead, St. Joseph's	42	4	46	42	6	48	629	610	59	54	688	664	1,352	1,222	112	1,199	112	17	1
Bassano Municipal	26	14	40	51	3	54	906	1,114	113	83	1,019	1,197	2,216	1,972	192	1,936	192	37	1
Beaverlodge Municipal	20	6	26	25	6	31	388	460	30	29	418	489	907	843	59	823	58	9	1
Bentley Municipal	16	9	25	10	2	12	323	499	64	70	387	569	956	804	132	797	129	15	3
Berwyn Municipal	21	5	26	16	7	23	249	298	30	20	279	318	597	542	50	532	47	4	1
Blairmore, C.N.P. Municipal	72	5	77	47	5	52	207	304	34	41	241	345	586	504	75	499	74	2	2
Bonnyville, K. H. Prittie	13	5	18	22	5	27	183	268	20	20	203	288	491	444	38	449	39	1	1
Bonnyville, St. Louis	52	12	64	64	12	76	551	892	88	77	639	969	1,608	1,425	165	1,400	163	17	1
Brooks Municipal	64	13	77	64	13	77	861	1,104	149	99	1,010	1,203	2,213	1,931	246	1,915	242	20	3
Calgary General	672	110	782	626	110	736	7,705	13,725	2,437	2,290	10,142	16,015	26,157	21,011	4,659	20,423	4,608	58	63
Calgary General Psychiatric	328	54	382	336	64	400	197	318	...	...	197	318	515	501	498	498	...	3	...
Calgary Holy Cross	156	...	156	120	...	120	4,492	7,996	1,231	1,156	5,723	9,152	14,875	12,246	2,942	12,055	2,921	215	27
Calgary, Alberta Red Cross	...	...	...	...	...	...	135	...	...	...	154	135	289	227	...	237	...	1	...
Calgary, Salvation Army Grace	15	18	33	15	18	33	4	475	217	209	221	684	905	472	417	471	414	...	5
Canmore, St. Mary's	98	22	120	98	22	120	1,605	2,270	239	214	1,844	2,484	4,328	3,806	442	3,741	439	70	8
Canmore, Canmore	12	4	16	16	4	20	199	188	22	22	221	210	431	379	44	372	44	9	1
Cardston Municipal	24	6	30	30	6	36	452	832	97	101	549	933	1,482	1,270	195	1,253	195	19	1
Cardston, Little Bow	14	...	14	16	...	16	122	141	5	8	127	149	276	256	12	255	13	3	...
Castor, Our Lady of the Rosary	25	8	33	14	1	15	639	805	41	48	680	853	1,533	1,424	88	1,419	88	12	2
Ceres, Municipal	9	3	12	13	4	17	98	95	11	17	109	112	221	185	26	178	25	8	...
Clareholm Municipal	42	6	48	41	6	47	495	826	101	96	596	922	1,518	1,297	195	1,282	189	16	3
Coaldale, Community	13	5	18	20	5	25	291	509	48	47	339	556	895	784	94	788	94	4	5
Cold Lake, John Neil	13	3	18	26	3	29	390	600	67	63	457	663	1,120	981	128	972	125	6	1
Consort Municipal	22	8	30	22	8	30	242	269	37	32	279	301	580	499	67	493	68	8	1
Coronation Municipal	18	3	21	20	4	24	286	362	40	31	326	393	719	635	70	632	68	2	...
Daysland, Providence	22	5	27	25	5	30	437	646	33	34	470	680	1,150	1,061	67	1,050	64	13	1
Desmarais, St. Martin's	14	2	16	16	2	18	140	209	17	12	157	221	378	348	29	343	29	2	...
Devon, Civic	7	4	11	7	4	11	302	320	14	14	316	334	650	613	28	614	26	1	1

TABLE 30 — HOSPITAL BEDS AND MOVEMENT OF PATIENTS BY HOSPITAL, 1957 (Continued)
(Excluding Chronic and Domiciliary Beds)

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DIVISION OF HOSPITAL AND MEDICAL SERVICES

HOSPITAL	Bed Capacity		Bed Complement As at Dec. 31/57		Patients Under Care During Year						Admissions		Discharges		Deaths		Stillbirths†					
	Beds	Basinets	Total	Beds	Basinets	Total	Newborn						Adults and Children	Newborn	Adults and Children	Newborn						
							Adults and Children			Total								Total	Adults and Children	Newborn	Adults and Children	Newborn
							M	F	M	F	M	F										
Mercer, Mercer Hospital	6	4	6	2	4	2	166	143	22	17	188	160	348	309	39	302	38	4				
Mundare General	26	30	28	28	28	28	340	443	16	15	356	468	814	770	30	762	31	12				
Mymna Municipal	20	8	28	8	8	8	320	445	26	18	346	463	809	747	42	743	42	10				
Olds Municipal	41	9	50	44	10	54	483	715	112	109	595	824	1,419	1,176	216	1,146	216	30				
Oyen Municipal	17	5	22	17	5	22	182	248	36	36	218	284	502	417	71	421	68	4				
Peace River Municipal	37	9	46	43	9	52	805	1,047	121	107	926	1,154	2,080	1,818	220	1,800	221	15				
Pincher Creek, St. Vincent's	64	6	70	64	10	74	553	760	93	82	646	1,282	1,488	1,254	173	1,254	170	3				
Ponoka Municipal	48	11	59	46	11	59	621	1,022	118	86	739	1,108	1,841	1,624	201	1,611	195	4				
Provost Municipal	26	6	32	31	6	37	307	439	51	44	358	483	841	734	74	714	93	1				
Radway, St. Joseph's	14	6	20	17	6	23	272	431	35	39	307	470	777	698	69	687	69	3				
Raymond Municipal	18	5	23	20	5	25	240	418	46	43	286	461	747	654	88	643	83	4				
Red Deer Municipal	104	30	134	104	30	134	1,979	2,896	397	381	2,376	3,277	5,653	4,810	763	4,733	753	13				
Rimbey Municipal	19	8	27	20	4	34	621	836	110	106	731	942	1,673	1,443	215	1,411	208	16				
Rocky Mountain House, Municipal	35	9	44	35	9	44	535	651	78	90	613	741	1,354	1,163	164	1,149	160	4				
Smoky Lake Municipal	15	5	20	15	5	20	198	337	43	44	241	381	622	528	87	520	84	2				
Spirit River, Holy Cross	44	14	58	20	3	23	700	991	66	70	766	1,061	1,827	1,657	133	1,653	131	10				
Stettler Municipal	56	8	64	56	8	64	840	1,218	153	133	993	1,351	2,344	2,020	283	1,996	272	2				
St. Paul, St. Theresa	37	16	53	34	4	38	935	1,263	131	136	1,066	1,399	2,465	2,166	264	2,147	257	6				
Taber Municipal	68	11	79	72	18	90	1,060	1,574	199	171	1,259	1,745	3,004	2,593	366	2,563	360	1				
Three Hills Municipal	25	10	35	23	12	35	353	537	64	51	417	588	1,005	877	114	860	112	5				
Trofchu Municipal	31	9	40	35	9	44	419	785	64	47	483	832	1,315	1,186	111	1,167	106	2				
Trochu, St. Mary's	31	6	37	31	6	37	176	312	30	30	206	342	548	480	59	469	59	1				
Turner Valley Municipal	22	6	28	24	6	30	289	343	22	32	311	375	686	615	54	609	54	1				
Two Hills Municipal	35	9	44	39	10	49	585	758	53	38	638	796	1,434	1,321	90	1,310	89	5				
Vegreville, St. Joseph's	85	14	99	91	14	105	891	1,314	74	110	965	1,424	2,389	2,162	182	2,127	181	3				
Vermilion Municipal	54	14	68	57	14	71	573	880	87	87	660	967	1,627	1,430	171	1,415	164	4				
Viking Municipal	35	9	44	35	9	44	579	737	62	56	641	793	1,434	1,299	118	1,276	116	2				
Vilna, Our Lady's	14	3	17	18	3	21	190	307	35	46	225	353	578	488	81	488	78	1				
Vulcan Municipal	37	7	44	37	7	44	654	816	63	77	717	893	1,610	1,449	138	1,440	135	3				
Wainwright Municipal	48	14	62	48	14	62	672	918	110	124	782	1,042	1,824	1,565	232	1,561	232	8				
Westlock, Immaculata	75	18	93	90	18	108	1,321	1,738	144	130	1,465	1,868	3,333	3,000	267	2,978	268	4				
Wetaskiwin, Community	60	12	72	63	13	76	1,068	1,531	202	160	1,270	1,691	2,961	2,561	356	2,487	349	6				
Willingdon, General	13	3	16	25	4	29	343	475	28	29	371	504	875	805	54	791	55	1				
TOTAL	7,024	1,403	8,427	7,228	1,400	8,628	94,708	138,710	17,930	17,035	112,638	155,745	268,383	228,972	34,372	224,967	33,858	3,747				
																		477				

*Average for the year

**Not available

†Not including non-viable

TABLE 31
ACTIVE TREATMENT HOSPITAL BEDS, 1949-1957
(Excluding Chronic and Domiciliary Beds)

YEAR	BED CAPACITY (At Dec. 31)			BED COMPLEMENT (At Dec. 31)			Beds Per 1,000 Pop. based on Complement		Adult and Children Patients Per Bed Complement Per Year
	Beds and Cribs	Bassineets	Total	Beds and Cribs	Bassineets	Total	Beds and Cribs	Total	
1949	4,684	910	5,594	5,617	1,079	6,696	5.4	6.4	28.6
1950	4,992	945	5,937	5,982	1,107	7,089	5.6	6.6	27.2
1951	5,521	998	6,519	6,239	1,132	7,371	5.9	6.9	27.3
1952	5,752	1,022	6,774	6,159	1,165	7,324	5.9	6.9	30.2
1953	6,371	1,083	7,454	6,810	1,242	8,052	6.3	7.4	29.0
1954	6,546	1,144	7,690	6,910	1,283	8,193	6.3	7.4	29.7
1955	6,866	1,314	8,180	7,142	1,371	8,513	6.4	7.7	29.7
1956	6,939	1,396	8,335	7,096	1,339	8,435	6.3	7.5	31.0
1957	7,024	1,403	8,427	7,228	1,400	8,628	6.2	7.4	32.3

TABLE 32
HOSPITAL STAFF—FULL TIME AND PART TIME AS OF DECEMBER 31, 1955-1957

	1955	1956	1957	Increase 1957 Over 1956	Percentage of Increase over 1956
Nurses, Graduates	1,895	2,074	2,377	303	14.6
Students	1,437	1,253	1,517	264	21.0
Nursing Aides, Certified	653	686	785	99	14.4
Trainees	13	93	118	25	26.8
Orderlies	191	208	252	44	21.1
Interns	127	123	129	6	4.8
Salaried Doctors	44	55	58	3	5.4
Technicians	287	337	364	27	8.0
Dietitians	47	77	100	23	29.8
All others*	4,274	4,398	4,679	281	6.3
Total Staff	8,968	9,304	10,379	1,075	11.6

*Matrons included with "all others"

TABLE 33 — HOSPITAL STAFF AS AT DECEMBER 31, 1957—BY HOSPITAL
FULL-TIME & PART-TIME

HOSPITAL	Total	Salaried Doctors	NURSES		NURSES' AIDES		Orderlies	Interns	Technicians	Dietitians	All Others*	Organized Medical Staff	Nurses' Training School	Graduated During Year
			Graduate	Student	Certified	Trainee								
Athabasca Municipal	35	...	10	...	4	...	...	...	1	...	20	XX	...	...
Banff, Mineral Springs	44	...	12	...	2	...	...	...	2	...	27	...	...	...
Barhead, St. Joseph's	46	...	10	...	5	...	...	...	...	1	28	X	...	...
Bassano Municipal	17	...	...	...	2	...	...	...	...	...	...	...	...	...
Beaverlodge Municipal	19	...	5	...	...	...	...	...	1	...	13	...	...	...
Bentley Municipal	14	...	...	...	...	...	...	...	...	...	6	...	...	...
Berwyn Municipal	17	...	5	...	3	...	...	...	...	...	13	...	...	...
Blairmore, C.N.P. Municipal	50	...	2	...	7	...	...	...	1	...	28	...	...	...
Bonnyville, K. H. Prittle	11	...	12	...	...	3	...	...	...	...	...	...	...	...
Bonnyville, St. Louis	38	...	4	...	1	...	...	...	...	...	6	...	...	...
Bonnyville, St. Louis	38	...	6	...	3	...	...	...	3	1	28	X	...	...
Brooks Municipal	57	...	18	...	9	6	...	...	2	1	21	XX	...	...
Calgary, Alberta Red Cross	118	...	25	...	26	...	...	...	...	...	64	XX	...	...
Calgary General	1,272	5	317	259	115	...	36	15	33	8	484	XX	X	65
Calgary, Holy Cross	713	2	155	163	54	...	16	5	26	5	287	XX	X	55
Calgary, Salvation Army Grace	27	...	8	...	4	...	...	...	...	...	15	XX	...	...
Camrose, St. Mary's	126	...	23	...	12	5	3	...	7	...	76	XX	...	...
Camrose Hospital	12	2	4	...	...	...	...	...	...	...	5	...	...	...
Cardston Municipal	35	...	9	...	10	...	...	...	1	1	14	XX	...	...
Cardston, Little Bow Municipal	13	...	7	...	...	...	...	...	...	...	...	XX	...	...
Castor, Our Lady of the Rosary	46	...	4	...	5	...	8	...	2	1	26	XX	...	...
Cereal Municipal	10	...	2	...	1	...	...	...	...	...	7	XX	...	...
Clareholm Municipal	39	...	13	...	6	...	...	...	2	...	18	XX	...	...
Coaldale, Community	10	...	4	...	5	...	...	...	...	3	7	...	...	...
Cold Lake, John Nell	20	...	4	...	4	...	...	...	...	...	12	...	...	...
Consort Municipal	15	...	5	...	...	4	...	...	...	...	6	...	...	...
Coronation Municipal	15	...	5	...	...	...	5	...	...	1	4	...	...	...
Daysland, Providence	27	...	6	...	...	...	...	...	2	4	10	X	...	...
Devon, Civic	13	1	5	...	2	...	...	...	2	...	3	...	...	...
Desmarais, St. Martin's	5	...	1	...	...	...	...	...	...	...	4	...	...	...
Didbury Municipal	45	...	12	...	2	13	...	...	...	...	18	X	...	...

Drumheller Municipal	95	31	...	7	8	4	...	3	1	41	X	...
Eckville Municipal	26	8	...	2	...	...	...	2	2	14	...	...
Edmonton, Beulah Home	15	3	175	11	8	14	15	83	4	10	X	...
Edmonton, General	785	182	102	21	...	15	8	28	4	340	X	54
Edmonton, Misericordia	687	212	...	...	...	...	...	...	...	291	X	32
Edmonton, Royal Alexandra	1,136	215	206	122	...	38	34	48	7	460	X	52
Edmonton, University	1,486	275	322	52	4	63	50	32	7	656	X	91
Edson, St. John's	34	9	...	2	...	...	...	3	...	20	...	...
Elk Point, Municipal	52	10	...	5	...	17	...	1	...	24	X	...
Elnora Municipal	16	5	...	...	...	...	...	...	...	6	...	...
Empress Municipal	17	4	...	4	...	...	...	1	1	7	...	...
Fairview Municipal	36	10	...	5	...	...	...	1	1	19	X	...
Fort Macleod Municipal	32	10	...	6	...	1	...	1	...	14	...	...
Fort McMurray, St. Gabriel's	18	2	...	3	...	...	...	...	1	12	...	...
Fort Vermilion, St. Theresa	30	4	...	2	4	...	...	4	1	13	...	...
Galahad, St. Joseph's	26	5	...	3	...	...	...	2	1	15	...	...
Glendon Municipal	19	4	...	8	...	...	...	2	...	7	X	...
Grande Prairie Municipal	63	18	...	12	...	...	...	2	...	31	X	...
(a) Hythe—Sub Hospital	7	2	...	2	...	...	...	...	...	3	...	...
Hanna Municipal	48	11	...	10	7	...	...	1	1	18	X	...
Hardisty, St. Anne's	24	4	...	...	...	...	...	4	1	15	...	...
High Prairie, Providence	48	13	...	2	...	...	...	4	1	48	X	...
High River Municipal	92	17	...	3	3	...	...	1	...	18	X	...
Husky Municipal	39	12	...	2	...	...	...	...	...	19	X	...
Islay Municipal	11	3	...	2	...	...	...	1	...	5	...	...
Jasper, Seton	18	5	...	...	...	...	...	2	1	10	...	...
Killam, General	28	7	...	1	...	...	...	2	...	18	...	...
Lacombe Municipal	54	17	...	11	...	...	...	2	...	24	X	...
Lac La Biche, St. Catherine's	49	5	...	...	...	...	...	2	1	41	X	...
Lamont, Archer Memorial	111	23	36	...	...	...	1	3	1	47	X	14
Lethbridge Municipal	387	85	85	17	...	11	...	17	2	168	X	22
Lethbridge, St. Michael's	295	38	78	8	6	...	...	13	3	147	X	24
McLennan, Sacred Heart	79	13	...	4	17	...	...	2	1	42	...	...
Magrath Municipal	20	6	...	6	...	...	...	1	...	7	...	...
Manning Municipal	23	7	...	2	...	...	...	1	...	13	...	...
Mannville Municipal	13	4	...	...	...	...	...	...	...	...	...	...
Mayerthorpe Municipal	27	5	...	6	...	...	...	2	2	9	X	...
Medicine Hat Municipal	225	67	52	12	4	...	...	3	1	12	X	...
Mercoal Municipal	8	3	...	...	...	...	...	...	1	85	X	13
Mundare General	18	7	...	...	...	...	...	...	1	4	...	...
Mynnam Municipal	16	5	...	2	3	...	...	...	...	11	...	...
Olds Municipal	41	10	...	11	...	...	...	4	...	6	...	...
Oyen Municipal	12	4	...	2	1	...	...	...	...	5	X	...

TABLE 33 — HOSPITAL STAFF AS AT DECEMBER 31, 1957—BY HOSPITAL (Continued)
FULL-TIME & PART-TIME

HOSPITAL	Total	Salaried Doctors	NURSES		NURSES' AIDES		Orderlies	Interns	Technicians	Dietitians	All Others*	Organized Medical Staff	Nurses' Training School	Graduated During Year
			Graduate	Student	Certified	Trainee								
Peace River Municipal	46	...	10	...	6	3	1	...	2	1	28	X	...	...
Pincher Creek, St. Vincent's	63	...	8	...	...	4	...	...	2	...	48	...	...	...
Ponoka Municipal	47	...	14	...	8	...	...	...	1	...	20	X	...	...
Provost Municipal	24	...	3	...	2	...	...	...	...	...	14	X	...	...
Radway, St. Joseph's	20	...	4	...	1	6	...	...	1	1	14	...	...	...
Raymond Municipal	17	...	4	...	...	...	...	...	...	...	7	...	...	...
Red Deer Municipal	141	1	42	...	8	...	1	...	5	1	83	X	...	...
Rimbey Municipal	30	...	6	...	6	...	...	...	1	1	16	...	...	...
Rocky Mountain House Municipal	34	...	9	...	3	4	...	...	1	...	17	...	...	...
Smoky Lake Municipal	14	1	4	...	3	...	...	...	...	...	6	...	...	...
Spirit River, Holy Cross	60	...	6	...	4	...	2	...	2	2	44	...	...	...
Stettler Municipal	65	...	18	...	5	...	1	...	2	2	39	X	...	...
St. Paul, St. Theresa	65	...	8	...	3	...	1	...	5	...	48	X	...	...
Taber Municipal	73	...	25	2	19	...	1	...	2	1	23	X	...	...
Three Hills Municipal	23	...	6	...	8	...	...	...	...	2	7	...	...	...
Torfield Municipal	28	...	8	...	5	...	...	...	...	...	15	...	...	...
Trochu, St. Mary's	15	...	2	...	4	...	...	...	...	2	7	...	...	...
Turner Valley Municipal	25	...	7	...	...	7	...	...	...	...	...	...	...	...
Two Hills Municipal	28	...	7	...	3	...	...	...	1	...	11	...	...	...
Vegreville, St. Joseph's General	109	...	19	37	1	...	1	1	5	7	17	X	X	9
Vermilion Municipal	34	...	13	...	6	...	...	...	...	1	14	X	...	...
Viking Municipal	38	...	9	...	9	...	...	...	4	...	16	...	...	...
Vilna Municipal	27	...	5	...	1	...	...	...	6	1	14	...	...	...
Vulcan Municipal	24	...	8	...	...	...	...	...	1	...	15	...	...	...
Wainwright Municipal	48	...	16	...	6	...	1	...	3	...	21	X	...	...
Westlock, Immaculata	60	...	11	...	2	3	...	...	4	1	39	X	...	...
Wetaskiwin, Community	51	...	16	...	8	4	...	...	1	...	22	X	...	...
Willingdon General	16	1	4	...	1	...	...	...	1	...	9	...	...	...
TOTAL	10,379	58	2,377	1,517	785	118	252	129	364	100	4,679	...	...	431

*Matron included with "All Others"

PART III

ANNUAL REPORT

OF THE

Bureau of Vital Statistics

OF THE

DEPARTMENT OF PUBLIC HEALTH

PROVINCE OF ALBERTA

1957

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BUREAU OF VITAL STATISTICS

JOHN COLVILLE, *Deputy Registrar General*

The 1957 Report of the Vital Statistics Division of the Department of Public Health is the 52nd report published since the establishment of the Province and shows slight decreases in the birth, marriage and maternal mortality rates and slight increases in the death and infant mortality rates over the previous year.

POPULATION

The population of the Province of Alberta for the year 1957 has been estimated by the Dominion Bureau of Statistics as 1,160,000. All rates in this report are therefore based on that figure.

BIRTHS

A high birth rate has been maintained in the Province for the past decade and the 1957 rate of 30.8 per 1,000 population is the second highest of the Provinces of Canada. The rate for all of Canada is 28.3. There were 35,718 children born to residents of the Province during 1957, an increase of 767 over the previous year. The rate of male to female births was 1,055 males to 1,000 females and of the total births 18,343 were males and 17,375 females. There were 368 sets of twins and 5 sets of triplets born during the year. Illegitimate births numbered 1,810 an increase of 136 over the previous year and constituting a rate of 5.06 per 100 live births. Eighty-five per cent of the births occurred in urban places of 1,000 population and over, and 97% in hospitals.

The number of births registered in the cities of the Province were as follows: Calgary, 7,456; Camrose, 444; Drumheller, 287; Edmonton, 11,522; Lethbridge, 1,369; Medicine Hat, 856; Red Deer, 761 and Wetaskiwin, 355.

For the purpose of comparison the following are the recent birth rates for Canada and certain other countries:

Canada	28.3	Northern Ireland	21.5
Newfoundland	36.0	Ireland (Republic)	21.2
Prince Edward Island	27.0	United States	25.0
Nova Scotia	27.5	Australia	22.9
New Brunswick	30.1	New Zealand	24.9
Quebec	29.8	Denmark	16.8
Ontario	28.8	Finland	19.8
Manitoba	26.0	France	18.4
Saskatchewan	27.2	Italy	18.3
Alberta	30.8	Austria	16.8
British Columbia	26.1	Norway	18.2
England and Wales	16.1	Netherlands	21.2
Scotland	19.0	Portugal	23.3
Spain	21.7	Sweden	14.6
Switzerland	17.7	Western Germany	17.0

MARRIAGES

The marriage rate of 8.7 per 1,000 population for 1957 is the highest of the Canadian Provinces and Alberta has held the poll position since 1949. The highest marriage rate in the history of

the Province occurred in 1946 and the rate was 11.8. There were 10,117 marriages registered during the year, an increase of 152 over the previous year.

There were 366 brides of 16 years and under; 3,041 were between the ages of 17 and 19; 4,035 were between the ages of 20 and 24, and 10 were 75 years and over. Of the bridegrooms, 220 were 18 years of age and under; 4,943 were between the ages of 19 and 24, and 27 were 75 years and over. Seventy-three per cent of the brides and 50% of the bridegrooms were 24 years or under at the time of marriage. Of the brides 9,109 were spinsters; 479 widows and 529 divorced, and of the bridegrooms, 9,242 were bachelors; 338 were widowers and 537 divorced.

The number of marriages registered in the cities of the Province were as follows: Calgary, 2,116; Camrose, 71; Drumheller, 62; Edmonton, 3,113; Lethbridge, 404; Medicine Hat, 290; Red Deer, 198 and Wetaskiwin, 87.

The following Table shows the marriage rates for Canada and certain other countries:

Canada	8.0	United States	8.9
Newfoundland	7.1	Australia	7.7
Prince Edward Island	6.3	New Zealand	7.9
Nova Scotia	7.4	Denmark	7.3
New Brunswick	7.6	Finland	7.2
Quebec	7.8	France	7.0
Ontario	8.3	Italy	7.5
Manitoba	7.7	Austria	8.1
Saskatchewan	7.4	Norway	7.1
Alberta	8.7	Netherlands	8.5
British Columbia	8.5	Portugal	8.0
England and Wales	7.7	Spain	8.4
Scotland	8.3	Sweden	7.0
Northern Ireland	6.7	Switzerland	8.1
Ireland (Republic)	5.0	Western Germany	9.0

DIVORCES

During the year 726 Divorces were recorded, 317 were granted to husbands and 409 to wives. Eight Decrees of Nullity were also recorded, 2 were granted to husbands and 6 to wives. The highest number of Divorces recorded in any one year was in 1946 and numbered 974.

DEATHS

The death rate for 1957 is 7.1 per 1,000 population and this is the lowest rate for the Provinces of Canada. Alberta has held the lowest death rate in Canada for the past four consecutive years.

The deaths of 8,255 persons were registered during the year, 5,190 of which were males and 3,065 females and the ratio of deaths between the sexes was 1,693 males to 1,000 females. Of the total deaths 55.7% were decedents of 65 years and over.

The number of deaths registered in the cities of the Province were as follows: Calgary, 1,488; Camrose, 77; Drumheller, 39; Edmonton, 1,626; Lethbridge, 234; Medicine Hat, 209; Red Deer, 96; and Wetaskiwin, 55.

The number of deaths from heart disease has been increasing during the last few decades and the year 1957 was no exception.

Heart Disease is still the leading cause of death and accounted for 2,371 deaths in 1957, an increase of 73 over the previous year. The rate of 204 deaths per 100,000 population is the same as in 1956.

During the year, 1,262 deaths were assigned to Cancer, an increase of only 11 over the previous year. Deaths from Cancer have been on the increase for a number of years and some of the increase may be attributed to the aging of the population. Vascular lesions affecting the central nervous system accounted for 939 deaths, a substantial increase over the previous year's figure of 806. Deaths from Tuberculosis (all forms) increased sharply from the previous year's total of 43 to 68. The number of deaths due to Diabetes also rose sharply from 98 in the year 1956 to 141. Deaths from Measles increased from 3 in the previous year to 16. The Asian Flu Epidemic attributed to the sharp increase in the number of deaths from Pneumonia (all forms) and Influenza, the former accounted for 352 deaths as compared to 325 for the previous year, and the latter to 135 as compared to 35.

There was an encouraging decrease in the number of violent and accidental deaths (suicides excepted), the number registered for 1957 was 640 as compared to 667 for the previous year. The notable decrease in this section occurred in deaths from motor vehicle accidents, 247 were registered, a reduction of 36 under the 1956 total. Other violent and accidental deaths registered were as follows: Other transport accidents, 39; accidental poisonings, 35; accidental falls, 92; machinery accidents, 34; accidents caused by fire and explosion of combustible material, 3; accidents caused by hot substances, corrosive liquid, steam and radiation, 4; accidents caused by firearms, 14; accidental drownings, 43; all other accidents, 85; suicides, 105; homicides, 10 and injury resulting from operations of war, 1.

The Death Rates for Canada, the Provinces and certain other Countries are as follows:

Canada	8.2	United States	9.6
Newfoundland	7.5	Australia	8.8
Prince Edward Island	9.3	New Zealand	9.3
Nova Scotia	8.5	Denmark	9.3
New Brunswick	8.1	Netherlands	7.5
Quebec	7.6	Finland	9.4
Ontario	8.7	France	12.0
Manitoba	8.6	Italy	10.0
Saskatchewan	7.7	Austria	12.7
Alberta	7.1	Norway	8.6
British Columbia	9.2	Portugal	11.3
England and Wales	11.5	Spain	9.8
Scotland	11.9	Sweden	9.9
Northern Ireland	10.9	Switzerland	10.0
Ireland (Republic)	11.9	Western Germany	11.3

MATERNAL DEATHS

There were 13 puerperal deaths registered during the year, a decline of 2 under the previous year. The rate of 0.3 per 1,000 live births compares favourably with the rates in the other Provinces.

MATERNAL DEATH RATES PER 1,000 LIVE BIRTHS

Canada	0.5	Ontario	0.4
Newfoundland	1.3	Manitoba	0.4
Prince Edward Island	0.7	Saskatchewan	0.2
Nova Scotia	0.7	Alberta	0.3
New Brunswick	0.3	British Columbia	0.4
Quebec	0.8		

INFANT DEATHS

There was a sharp increase in the number of deaths of children under one year of age, 963 were recorded as compared to 860 in the previous year. The rate of infant deaths per 1,000 live births was 27, an increase of 2 over the 1956 rate. This is the first year since 1949 in which the infantile mortality rate increased over that of the preceding year. The rate for Alberta is the second lowest for the Provinces of Canada. Of the total deaths, 531 were males and 432 females.

INFANT MORTALITY RATES PER 1,000 LIVE BIRTHS

Canada	31	United States	26
Newfoundland	39	Australia	(1956) 22
Prince Edward Island	23	New Zealand	20
Nova Scotia	27	Denmark	23
New Brunswick	35	Netherlands	17
Quebec	38	Finland	28
Ontario	25	France	34
Manitoba	32	Italy	50
Saskatchewan	25	Austria	45
Alberta	27	Norway	(1955) 21
British Columbia	28	Portugal	89
England and Wales	23	Spain	48
Scotland	29	Sweden	17
Northern Ireland	29	Switzerland	23
Ireland (Republic)	33	Western Germany	36

Stillbirths numbered 385, a decrease of 24 under the total for the preceding year. The rate also dropped from the 1956 figure of 11.7 per 1,000 live births to 10.8, and this rate is the lowest in Canada. Of the total stillbirths, 187 were males and 198 females.

There was an increase in the volume of work completed by this Division during the year, the births of 89 children were legitimated by the subsequent marriage of their parents; 1,284 delayed registrations of birth were filed; 1,382 legal adoptions recorded; 460 legal change of name, 1,719 change of Christian name were filed, and 90,450 certificates issued comprising 71,762 births, 14,859 marriages and 3,829 deaths.

DIVISIONS OF ALBERTA FOR CENSUS AND VITAL STATISTICS PURPOSES

As the Province of Alberta is not divided into Counties, and the political divisions are not permanently fixed, it has been found advisable to use smaller areas, the Dominion Census Divisions.

Prior to 1956 the Province was divided into 17 census divisions. However in 1956 the census division boundaries were completely revised and there are now 15 census divisions. These divisions are further sub-divided into municipal areas. The municipal areas which were each originally within the boundaries of a single census division, have been reorganized by the Provincial authorities into larger units, and now, in many cases, part of the new municipality or improvement district is in one census division and part in another.

The following table shows the census divisions divided into municipalities, improvement districts, cities, towns and villages with the 1956 and 1951 division population figures.

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES
FOR CENSUS YEARS, 1951 AND 1956

Division and Subdivision	Total		Division and Subdivision	Total	
	1956	1951		1956	1951
ALBERTA	1,123,116	939,501	Division No. 5—Continued:		
Division No. 1	34,496	28,317	Cities:		
2. Forty Mile	4,224	3,924	Drumheller	2,632	2,601
11. I.D.—D.A.	4,076	4,025	Towns:		
22. I.D.—D.A.	592	563	Gleichen	581	430
Army Experimental Range	863	533	Strathmore	727	704
Cities:			Three Hills	1,095	1,026
Medicine Hat	20,826	16,364	Vulcan	1,204	1,040
Towns:			Villages:		
Bow Island	1,001	653	Acme	292	275
Irvine	232	224	Arrowwood	240	222
Redcliff	2,001	1,538	Carbon	354	374
Villages:			Carmangay	299	285
Burdett	225	118	Champion	402	378
Foremost	456	375	Cluny	197	202
Division No. 2	74,891	67,694	Craigmyle	138	136
14. Taber	6,730	6,157	Delia	282	278
23. Lethbridge	11,624	13,857	Hussar	168	120
Newell County No. 4	5,943	7,023	Lomond	189	153
Warner County No. 5	5,157	5,322	Milo	167	141
Cities:			Morrin	267	226
Lethbridge	29,462	22,947	Munson	82	78
Towns:			Rockyford	226	246
Bassano	753	624	Rumsey	104	110
Brooks	2,320	1,648	Standard	230	237
Coaldale	2,327	806	Trochu	680	630
Milk River	642	481	Division No. 6	237,886	177,441
Raymond	2,399	2,279	31. Foothills	7,902	8,100
Taber	3,688	3,042	44. Rocky View	12,788	14,770
Villages:			46. I.D.—D.A.	4,650	1,390
Barons	352	369	49. Mountain View	9,273	9,497
Duchess	177	258	Indian Reserves	478	385
Grassy Lake	282	167	Cities:		
Nobleford	263	255	Calgary	181,780	129,060
Picture Butte	881	865	Towns:		
Rosemary	158	.....	Black Diamond	991	1,154
Stirling	430	520	Bowness	6,217	2,922
Tilley	240	259	Didsbury	1,227	1,180
Vauxhall	713	393	Forest Lawn	3,150	1,079
Warner	450	422	High River	2,102	1,888
Division No. 3	30,426	27,667	Okotoks	764	767
6. Cardston	5,398	6,293	Olds	1,980	1,617
9. Pincher Creek	3,109	3,215	Sundre	923	337
26. Willow Creek	6,344	5,166	Villages:		
Indian Reserves	3,524	2,555	Airdrie	327	267
Towns:			Beiseker	321	325
Cardston	2,607	2,487	Blackie	198	224
Claresholm	2,431	1,608	Carstairs	449	468
Fort Macleod	2,103	1,860	Cayley	146	139
Granum	322	327	Cochrane	707	530
Magrath	1,382	1,320	Cremona	192	.....
Nanton	1,047	934	Crossfield	459	443
Pincher Creek	1,729	1,456	Irricana	158	180
Stavelly	338	327	Turner Valley	704	719
Villages:			Division No. 7	40,214	40,217
Cowley	92	119	52. Provost	3,621	3,751
Division No. 4	14,294	13,182	53. Paintearth	3,515	3,462
34. Acadia	914	705	61. Wainwright	4,481	4,690
Special Area No. 2	3,687	3,590	62. Flagstaff	6,806	7,194
Special Area No. 3	5,036	4,811	Stettler County No. 6	6,061	6,059
Towns:			Buffalo National Park	604	2,708
Hanna	2,327	2,027	Towns:		
Cereal	154	135	Castor	958	798
Chinook	154	116	Coronation	784	738
Consort	434	396	Daysland	499	475
Empress	480	411	Hardisty	628	536
Oyen	562	433	Provost	878	676
Veteran	241	206	Stettler	3,359	2,442
Youngstown	305	352	Wainwright	2,653	1,996
Division No. 5	38,120	39,055	Villages:		
40. Wheatland	5,582	5,779	Alliance	313	281
42. I.D.—D.A.	5,502	6,925	Amisk	151	.....
47. Starland	2,831	2,891	Big Valley	354	307
48. Kneehill	7,055	7,174	Botha	102	98
Vulcan County No. 2	5,087	5,094	Chauvin	353	340
Indian Reserves	1,507	1,300	Czar	153	123
			Donalda	256	318
			Edgerton	292	309
			Forestburg	552	443
			Gadsby	145	128
			Galahad	215	198

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES
FOR CENSUS YEARS, 1951 AND 1956 (Continued)

Division and Subdivision	Total		Division and Subdivision	Total	
	1956	1951		1956	1951
Division No. 7—Continued:			Division No. 10—Continued:		
Villages—Continued:			Bawlf	287	236
Halkirk	209	148	Bittern Lake	45	25
Hughenden	212	218	Bruderheim	290	387
Irma	421	369	Chipman	192	180
Killam	524	465	Derwent	289	233
Lougheed	201	186	Edberg	167	188
Sedgewick	608	485	Ferintosh	195	205
Strome	306	276	Hairy Hill	183	205
Division No. 8	64,168	57,513	Hay Lakes	193	231
55. Red Deer	12,830	12,243	Holden	544	504
64. Lacombe	8,351	8,612	Innisfree	318	287
65. I.D.—D.A.	5,199	6,066	Kitscoty	283	235
68. I.D.—D.A.	81	194	Lamont	632	637
Ponoka County No. 3	8,611	9,139	Lavoy	127	122
Indian Reserves	1,230	1,129	Mannville	599	528
Cities:			Marwayne	337	.....
Red Deer	12,338	7,575	Minburn	150	186
Towns:			Myrnam	440	388
Innisfail	1,883	1,417	New Norway	273	258
Lacombe	2,747	2,277	Ryley	495	406
Ponoka	3,387	2,574	Willington	431	281
Rimbeey	980	757			
Rocky Mountain House	1,285	1,147	Division No. 11	323,539	235,475
Sylvan Lake	1,114	985	74. Wetaskiwin	9,466	8,222
Villages:			75. Leduc	11,497	12,526
Alix	517	461	77. I.D.—D.A.	3,259	1,310
Bentley	536	439	83. Strathcona	8,873	7,591
Blackfalds	340	154	84. Stony Plain	8,491	8,962
Bowden	296	277	90. Sturgeon River	13,865	11,174
Caroline	296	.....	Indian Reserves	1,786	1,208
Clive	249	241	Cities:		
Delburne	429	395	Edmonton	226,002	159,631
Eckville	456	379	Wetaskiwin	4,476	3,824
Elnora	177	211	Towns:		
Gull Lake	32	32	Beverly	4,602	2,159
Mirror	591	635	Calmar	730	944
Penhold	213	174	Devon	1,429	842
Division No. 9	17,239	19,496	Drayton Valley	2,588	.....
8. I.D.—D.A.	110	167	Fort Saskatchewan	2,582	1,076
10. I.D.—D.A.	3,269	4,706	Jasper Place	15,957	9,139
27. I.D.—D.A.	100	125	Leduc	2,008	1,842
33. I.D.—D.A.	47	31	Morinville	957	892
50. I.D.—D.A.	75	71	St. Albert	1,320	1,129
58. I.D.—D.A.	429	443	Stony Plain	1,098	878
69. I.D.—D.A.	152	1,223	Villages:		
946. I.D.—D.A.	2,456	2,630	Entwistle	354	.....
Banff National Park	3,069	2,856	Itaska Beach	2	.....
Banff (not incorp.)	2,518	2,357	Lakeview	41	15
Jasper National Park	2,322	1,899	Legal	457	523
Jasper (not incorp.)	2,105	1,728	Ma-Me-O Beach	137	98
Waterton Lakes .....	.....	.....	Millet	427	402
National Park	277	238	Seba Beach	141	103
Indian Reserves	1,173	974	Silver Beach	17	.....
Towns:			Spruce Grove	309	.....
Blairmore	1,973	1,933	Thorsby	411	385
Coleman	1,566	1,961	Warburg	257	.....
Villages:					
Frank	221	239	Division No. 12	44,947	39,886
Division No. 10	71,500	70,677	85. I.D.—D.A.	348	208
63. Camrose	9,626	10,457	86. St. Paul	7,979	9,041
71. Vermilion River	9,557	9,663	87. Bonnyville	10,058	6,744
72. Minburn	6,742	7,312	89. Smoky Lake	5,517	2,292
73. Beaver	6,883	7,202	101. I.D.—D.A.	2,039	2,235
81. Eagle	7,114	7,722	102. I.D.—D.A.	5,066	5,115
82. Lamont	7,700	8,778	121. I.D.—D.A.	197	274
Elk Island National Park	56	55	143. I.D.—D.A.	879	835
Cities:			Wood Buffalo National Park (pt.)	143	36
Camrose	5,817	4,131	Indian Reserves	3,530	3,168
Towns:			Towns:		
Lloydminster (pt.)	2,506	1,706	Bonnyville	1,495	1,139
Mundare	650	596	Cold Lake	1,097	.....
Tofield	800	692	Lac La Biche	967	905
Two Hills	713	525	McMurray	1,110	926
Vegreville	2,574	2,223	St. Paul	2,229	1,407
Vermilion	2,196	1,982	Villages:		
Viking	897	683	Elk Point	594	453
Villages:			Glendon	314	.....
Andrew	602	625	Smoky Lake	563	491
Bashaw	597	603	Vilna	374	378
			Warspite	159	.....
			Waskatenau	289	239

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES
FOR CENSUS YEARS, 1951 AND 1956 (Continued)

Division and Subdivision	Total		Division and Subdivision	Total	
	1956	1951		1956	1951
Division No. 13	45,033	46,638	Division No. 15—Continued:		
92. Westlock	8,731	8,795	128. I.D.—D.A.	947	593
93. Lac Ste. Anne	6,892	7,282	129. I.D.—D.A.	877	502
103. Athabasca	7,367	8,200	130. Smoky River	3,955	4,374
106. Barrhead	5,944	6,501	131. I.D.—D.A.	2,413	2,058
107. I.D.—D.A.	1,502	1,699	132. I.D.—D.A.	3,133	2,927
108. I.D.—D.A.	731	770	133. Spirit River	1,413	1,406
122. I.D.—D.A.	557	550	134. I.D.—D.A.	2,633	2,618
Thorhild County No. 7	5,596	6,174	135. Peace	1,732	1,741
Indian Reserves	332	279	136. Fairview	1,885	2,031
Towns:			137. I.D.—D.A.	127	124
Athabasca	1,293	1,068	138. I.D.—D.A.	3,489	4,210
Barrhead	1,610	1,243	139. I.D.—D.A.	2,635	3,007
Redwater	1,065	1,306	144. I.D.—D.A.	26	115
Westlock	1,136	1,111	145. I.D.—D.A.	136	158
Villages:			146. I.D.—D.A.	634	754
Alberta Beach	127	79	147. I.D.—D.A.	2,500	1,589
Boyle	304	.....	149. I.D.—D.A.	122	39
Clyde	221	219	Grande Prairie County		
Mayerthorpe	563	472	No. 1	8,899	10,126
Onoway	190	189	Indian Reserves	3,032	3,254
Radway	203	184	Towns:		
Sangudo	331	269	Beaverlodge	768	514
Thorhild	288	248	Fairview	1,260	929
Division No. 14	15,846	14,443	Falher	802	575
78. I.D.—D.A.	3,444	3,724	Grande Prairie	6,302	2,664
79. I.D.—D.A.	2,234	3,992	Grimshaw	904	564
95. I.D.—D.A.	4,696	2,561	High Prairie	1,743	1,141
96. I.D.—D.A.	314	299	McLennan	1,092	1,074
109. I.D.—D.A.	1,693	1,506	Peace River	2,034	1,672
Towns:			Spirit River	743	553
Edson	2,560	1,956	Villages:		
Villages:			Berwyn	342	288
Evansburg	358	.....	Donnelly	265	.....
Wildwood	547	405	Girouxville	300	.....
Division No. 15	70,417	61,800	Hines Creek	360	.....
110. I.D.—D.A.	346	73	Hythe	481	342
111. I.D.—D.A.	241	324	Kinuso	306	238
123. I.D.—D.A.	2	1	Manning	726	.....
124. I.D.—D.A.	3,216	2,853	Rycroft	424	372
125. I.D.—D.A.	3,155	3,277	Sexsmith	345	331
126. I.D.—D.A.	2,427	2,138	Valleyview	973	.....
			Wembley	272	251

TABLE 1—GENERAL SUMMARY OF VITAL STATISTICS FOR CENSUS DIVISIONS, ALBERTA, 1957

CENSUS DIVISIONS	LIVE BIRTHS			Live Births in Hospitals	Illegitimate Births	Stillbirths	Marriages	Excess Births Over Deaths	Total Deaths	Hospital Deaths	Infant Deaths	Neo-natal Deaths	Maternal Deaths
	Total	Male	Female										
ALBERTA	35718	18343	17375	34838	1810	385	10117	27463	8255	5731	963	640	12
Division No. 1	966	523	443	951	21	9	316	687	279	191	23	15	...
Division No. 2	2072	1086	986	2018	68	20	639	1623	449	327	37	29	1
Division No. 3	978	490	488	923	72	13	246	747	231	170	34	20	1
Division No. 4	428	228	200	409	12	3	83	305	123	89	11	10	...
Division No. 5	973	487	486	951	44	13	210	669	304	182	26	19	1
Division No. 6	7865	4027	3838	7836	400	82	2414	6040	1825	1200	190	124	1
Division No. 7	1126	570	556	1114	29	11	257	783	343	239	32	23	...
Division No. 8	1978	1015	963	1942	104	22	498	1487	491	372	56	39	2
Division No. 9	431	230	201	414	34	12	189	305	126	91	13	9	...
Division No. 10	1716	898	818	1698	50	14	546	1173	543	404	47	31	1
Division No. 11	11436	5811	5625	11396	551	126	3559	9265	2171	1608	265	196	2
Division No. 12	1581	820	761	1302	126	16	319	1234	347	211	59	35	2
Division No. 13	1070	570	500	1035	53	5	254	720	350	240	30	18	...
Division No. 14	593	303	290	574	24	7	79	454	139	93	26	19	...
Division No. 15	2505	1285	1220	2275	222	32	508	1971	534	314	114	53	1

TABLE 2—GENERAL SUMMARY OF VITAL STATISTICS FOR INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1957

CITY, TOWN OR VILLAGE	LIVE BIRTHS			Live Births in Hospitals	Illegitimate Births	Stillbirths	Marriages	Excess Births Over Deaths	Total Deaths	Hospital Deaths	Infant Deaths	Neo-natal Deaths	Maternal Deaths
	Total	Male	Female										
Athabasca	50	23	27	50	8	1	35	27	23	17	6	2	...
Barrhead	47	26	21	47	6	...	51	21	26	19	1	...	...
Beverly	217	104	113	217	6	5	23	188	29	19	7	6	1
Blairmore	39	24	15	39	2	...	18	30	9	8	1	1	...
Bonnyville	67	40	27	67	4	...	35	54	13	11	...	...	...
Bow Island	21	12	9	21	...	1	7	10	11	5	1	1	...
Bowness	268	129	139	268	8	2	33	243	25	17	7	3	...
Brooks	62	47	35	61	3	1	45	62	20	13	1	1	...
Calgary	6212	3200	3012	6208	352	65	2116	4724	1488	991	146	98	...
Camrose	172	108	64	172	5	3	71	95	77	65	5	5	...
Cardston	85	45	40	86	4	1	120	58	27	19	2	1	...
Claresholm	88	42	46	88	3	1	33	69	19	15	1	1	...
Coadale	81	44	37	81	1	...	32	72	9	6	...	...	...
Cold Lake	62	29	33	64	5	...	24	52	10	7	2	2	...
Coleman	55	30	25	54	...	3	18	32	23	17	2	2	...
Devon	51	22	29	51	2	...	2	45	6	5	3	1	...
Didsbury	31	11	20	31	1	2	30	13	18	11	...	...	...
Drayton Valley	218	126	92	213	6	...	19	206	12	8	7	...	...
Drumheller	100	50	50	100	6	1	62	61	39	27	5	5	...
Edmonton	8364	4198	4166	8360	427	83	3113	6738	1626	1241	194	144	1
Edson	163	83	80	163	6	2	53	133	30	19	5	4	...
Fairview	44	16	28	44	3	...	17	90	14	8	1	...	...
Forest Lawn	102	45	57	102	5	2	13	96	6	3	1	...	...
Fort Macleod	74	38	36	73	2	1	24	42	32	24	4	3	...
Fort Saskatchewan	101	46	55	101	6	3	25	83	18	14	6	3	...
Grande Prairie	306	155	151	306	14	2	117	254	52	29	9	8	...
Hanna	88	44	44	88	4	...	42	65	23	16	2	1	...
High Prairie	78	45	33	76	11	2	32	61	17	11	3	3	...
High River	49	23	26	49	3	...	37	21	28	20	...	...	...
Innisfail	61	34	27	61	3	1	42	36	25	20	3	3	...
Jasper Place	692	376	316	690	39	9	18	630	62	41	12	10	...
Lacombe	97	50	47	96	5	2	48	67	30	24	3	2	...
Leduc	69	29	40	69	1	1	32	58	11	8	2	2	...
Lethbridge	857	432	425	857	40	8	404	623	234	182	16	14	...
Lloydminster	118	57	61	118	6	1	69	96	22	16	2	1	...
Magrath	28	14	14	28	1	...	4	17	11	7	2	2	...
McLennan	58	25	33	58	2	...	17	51	7	5	2	1	...
McMurray	24	13	11	24	4	...	6	20	4	4	2	2	...
Medicine Hat	575	309	266	573	14	6	290	366	209	147	12	7	...
Nanton	37	20	17	37	2	2	12	21	16	14	3	2	...
Olds	84	44	40	84	7	...	45	63	21	12	3	1	1
Peace River	114	64	50	113	8	2	41	99	15	13	3	2	...
Pincher Creek	88	49	39	88	1	1	27	63	25	22	2	1	1
Ponoka	107	63	44	107	3	...	51	72	35	26	4	4	...
Raymond	46	26	20	46	2	1	17	35	11	9	3	2	...
Redcliff	43	19	24	43	3	...	1	29	14	8	1	1	...
Red Deer	554	282	272	553	20	7	198	458	96	69	10	10	1
Redwater	59	36	23	59	1	...	1	54	5	3	...	...	...
Rocky Mtn. House	93	36	57	89	5	...	25	70	23	16	5	4	...
St. Albert	56	24	32	56	2	...	12	38	18	7	1	1	...
St. Paul	107	51	56	107	6	...	36	84	23	16	3	3	...
Stettler	152	74	78	151	6	...	64	105	47	35	7	6	...
Stony Plain	47	24	23	45	3	1	22	34	13	9	2	1	...
Sylvan Lake	35	24	11	35	4	...	15	16	19	14	...	...	...
Taber	110	64	46	110	3	1	60	73	37	28	4	4	...
Three Hills	56	36	20	56	3	...	16	38	18	13	3	3	...
Vegreville	68	20	48	67	5	...	55	40	28	22	3	3	1
Vermilion	72	34	38	72	2	1	54	42	30	21	2	2	...
Vulcan	39	18	21	39	1	1	11	23	16	14	2	2	...
Wainwright	126	64	62	126	4	...	42	103	23	15	3	1	...
Westlock	47	22	25	47	5	...	30	27	20	16	...	...	...
Wetaskiwin	141	75	66	141	3	5	87	86	55	42	3	2	...

TABLE 3—DEATHS BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE, 1957

PLACE OF OCCURRENCE	Total (Occurrence)	PLACE OF RESIDENCE													
		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.	U.S.A.	Other
Total (residence)	137306	3198	916	5977	4595	36234	49164	7368	6743	8255	13711	93	325	644	83
Newfoundland	3213	3184	.....	2	.....	1	4	.....	.....	.....	.....	.....	.....	8	14
Prince Edward Is.	911	.....	899	2	2	2	2	.....	.....	.....	.....	.....	.....	4	.....
Nova Scotia	5976	8	5	5911	14	4	6	.....	.....	.....	1	.....	.....	22	5
New Brunswick	4660	1	4	16	4483	47	14	1	1	1	2	.....	.....	87	3
Quebec	36027	4	4	9	37	35656	197	2	1	4	5	.....	.....	81	25
Ontario	49451	1	1	17	21	397	48580	38	19	7	20	.....	.....	4330	16
Manitoba	7395	.....	.....	1	.....	5	61	7228	48	5	10	12	.....	20	5
Saskatchewan	6733	.....	.....	1	1	2	4	23	6597	60	27	1	.....	15	2
Alberta	8252	.....	.....	1	1	2	24	18	36	8075	47	2	25	19	2
British Columbia	13722	.....	.....	2	.....	3	11	18	23	69	13524	5	1	56	10
Yukon	89	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	85	.....	1	.....
Northwest Territories..	294	.....	.....	.....	.....	3	1	1	.....	5	1	.....	281	1	1
United States	583	.....	3	15	36	112	260	39	18	29	71	.....	.....	.....	.....

TABLE 4—DEATHS AND HOSPITAL DEATHS BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS, ALBERTA, 1957

CENSUS DIVISIONS	TOTAL DEATHS				DEATHS IN HOSPITALS			
	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere
ALBERTA	8252	8255	177	180	5721	5731	108	118
Division No. 1	251	279	8	36	172	191	4	23
Division No. 2	444	449	49	54	321	327	37	43
Division No. 3	203	231	20	48	137	170	12	45
Division No. 4	102	123	15	36	75	89	12	26
Division No. 5	241	304	29	92	130	182	11	63
Division No. 6	1939	1825	241	127	1291	1200	180	89
Division No. 7	287	343	23	79	187	239	10	62
Division No. 8	505	491	109	95	380	372	89	81
Division No. 9	122	126	26	30	78	91	11	24
Division No. 10	526	543	119	136	386	404	102	120
Division No. 11	2545	2171	530	156	1987	1608	478	99
Division No. 12	278	347	18	87	149	211	11	73
Division No. 13	255	350	24	119	144	240	13	109
Division No. 14	93	139	15	61	37	93	1	57
Division No. 15	461	534	24	97	247	314	11	78

TABLE 5—DEATHS AND HOSPITAL DEATHS BY OCCURRENCE AND RESIDENCE IN URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1957

CITY, TOWN OR VILLAGE	TOTAL DEATHS				DEATHS IN HOSPITALS			
	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere
Athabasca	59	23	38	2	46	17	29	....
Barrhead	44	26	25	7	40	19	24	3
Beverly	5	29	1	25	....	19	....	19
Blairmore	2	9	1	8	1	8	1	8
Bonnyville	20	13	10	3	19	11	9	1
Bow Island	6	11	1	6	....	5	....	5
Bowness	5	25	....	20	....	17	....	17
Brooks	32	20	15	3	25	13	14	2
Calgary	1651	1488	292	129	1153	991	240	78
Camrose	194	77	122	5	176	65	114	3
Cardston	34	27	12	5	26	19	10	3
Claresholm	34	19	16	1	30	15	16	1
Coaldale	10	9	3	2	7	6	3	2
Cold Lake	15	10	8	3	13	7	8	2
Coleman	4	23	....	19	....	17	....	17
Devon	2	6	1	5	2	5	1	4
Didsbury	34	18	18	2	26	11	17	2
Drayton Valley	3	12	1	10	....	8	....	8
Drumheller	80	39	52	11	71	27	50	6
Edmonton	2185	1626	723	164	1834	1241	689	96
Edson	45	30	27	12	34	19	24	9
Fairview	24	14	17	7	18	8	15	5
Forest Lawn	4	6	1	3	....	3	....	3
Fort Macleod	37	32	11	6	26	24	8	6
Fort Saskatchewan	4	18	....	14	....	14	....	14
Grande Prairie	81	52	45	16	66	29	44	7
Hanna	40	23	26	9	34	16	24	6
High Prairie	47	17	32	2	37	11	27	1
High River	55	28	33	6	50	20	33	3
Innisfail	38	25	24	11	32	20	20	8
Jasper Place	17	62	2	47	....	41	....	41
Lacombe	52	30	33	11	45	24	31	10
Leduc	4	11	1	8	....	8	....	8
Lethbridge	277	234	71	28	230	182	69	21
Lloydminster	3	22	....	19	....	16	....	16
Magrath	12	11	2	1	9	7	2	....
McLennan	24	7	18	1	21	5	16	....
McMurray	3	4	3	4	3	4	3	4
Medicine Hat	229	209	43	23	172	147	36	11
Nanton	2	16	....	14	....	14	....	14
Olds	45	21	30	6	32	12	25	5
Peace River	27	15	19	7	23	13	16	6
Pincher Creek	44	25	27	8	42	22	27	7
Ponoka	100	35	75	10	92	26	73	7
Raymond	17	11	8	2	13	9	6	2
Redcliff	5	14	2	11	....	8	....	8
Red Deer	108	96	36	24	91	69	35	13
Redwater	2	5	....	3	....	3	....	3
Rocky Mountain House	41	23	26	8	32	16	23	7
St. Albert	25	18	15	8	....	7	....	7
St. Paul	35	23	20	8	30	16	19	5
Stettler	62	47	23	8	49	35	20	6
Stony Plain	8	13	4	9	....	9	....	9
Sylvan Lake	4	19	1	16	....	14	....	14
Taber	46	37	18	9	34	28	14	8
Three Hills	18	18	6	6	16	13	5	2
Vegreville	45	28	21	4	40	22	21	3
Vermilion	36	30	14	8	26	21	12	7
Vulcan	22	16	13	7	18	14	10	6
Wainwright	27	23	13	9	20	15	11	6
Westlock	42	20	29	7	34	16	24	6
Wetaskiwin	80	55	38	13	68	42	38	12

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1957

CAUSE OF DEATH (Intermediate List)	SEX	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ALL CAUSES	Total	8255	279	449	231	123	304	1825	343	491	126	543	2171	347	350	139	534
	Male	5190	157	290	134	86	208	1114	219	328	88	337	1342	210	231	97	349
	Female	3065	122	159	97	37	96	711	124	163	38	206	829	137	119	42	185
I. INFECTIVE AND PARASITIC DISEASES	Total	148	1	9	6	2	6	19	4	11		4	36	22	8	2	18
	Male	92		4	5	1	4	17	3	9		2	21	11	2	2	11
	Female	56	1	5	1	1	2	2	1	2		2	15	11	6		7
A 1 Tuberculosis of respiratory system	Male	42		2		1	1	7	1	3		1	13	5	1	2	5
	Female	18											7	5			5
A 2 Tuberculosis of meninges and central nervous system	Male	2		1									1				
	Female	2								1				1			
A 5 Tuberculosis, all other forms	Male	1															
	Female	3		1				1							1		
A 10 All other syphilis	Male	13			3		2	2		1			4				1
	Female	1					1										
A12 Typhoid Fever	Male	1												1			
	Female	1							1								
A 13 Paratyphoid fever and other Salmonella infections	Male	1													1		
	Female																
A 17 Scarlet fever	Male	1															
	Female									1							
A 20 Septicaemia and pyaemia	Male	3						1		1				1			
	Female	4		1	1		1						1				
A 21 Diphtheria	Male	4												1	3		
	Female	2												2			
A 22 Whooping cough	Male	3								1							2
	Female	1								1							
A 23 Meningococcal Infections	Male	3		1									1				1
	Female	1											1				
A 28 Acute poliomyelitis	Male	2											1				1
	Female	4	1					1					1		1		
A 29 Acute infectious encephalitis	Male	1						1									
	Female	1											1				
A 32 Measles	Male	8						2	2	2		1					1
	Female	8		1		1						1	1	2	1		1
A 34 Infectious hepatitis	Male	4			2		1	1									
	Female	5		1				1				1	2				
A 39 Hydatid disease	Male	1															
	Female	1															1
A 43 All other diseases classified as infective and parasitic	Male	3						2					1				
	Female	4		1									1		2		
II. NEOPLASMS	Total	1282	31	82	40	21	45	309	43	80	21	79	353	44	59	14	61
	Male	734	14	45	24	14	26	171	25	52	11	45	198	26	40	7	36
	Female	548	17	37	16	7	19	138	18	28	10	34	155	18	19	7	25
A 44 Malignant neoplasm of buccal cavity and pharynx	Male	11					1	2				1	4	1	1		
	Female	3	1					2									
A 45 Malignant neoplasm of oesophagus	Male	13		1		1	1	3		1		1	4		1		
	Female	7						1	3	1			2				
A 46 Malignant neoplasm of stomach	Male	119	1	10	5	2	5	15	5	9	5	9	35	8	6		4
	Female	48	3	2	1			9	3	2	3	4	12	2	5	1	1
A 47 Malignant neoplasm of intestine, except rectum	Male	72	1	2	2		1	20	1	9		5	20	1	4	1	5
	Female	53	2	3	1	1	15	1	5	1	4	12	1	3		3	4
A 48 Malignant neoplasm of rectum	Male	37	2	3			1	7	3		3	9	1	4		4	
	Female	21		3				3	1	1	2	3	6	1			1
A 49 Malignant neoplasm of larynx	Male	7	1			1		2				3					
	Female	2						1	1								
A 50 Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	Male	106	3	7	3		3	26	4	4	2	9	26	5	6	3	5
	Female	12			1		1	5	2	1			1				1
A 51 Malignant neoplasm of breast	Male	2						1					1				
	Female	98		5	5		3	29	3	3		12	33	3	1		1
A 52 Malignant neoplasm of cervix uteri	Male	33	1	3				7	2	1	1		12	1	2		3
	Female																
A 53 Malignant neoplasm of other and unspecified parts of uterus	Male	17	1		1		5	4					2	1	1		2
	Female	82	1	2	6	1	2	24	3	9	1	3	21	2	4		3
A 54 Malignant neoplasm of prostate	Male	8						2					2		1		1
	Female	4						1					1	1			
A 55 Malignant neoplasm of skin	Male	9				1		4	1	2			1	1			
	Female	6		2				1					2				1

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1957—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No.														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A 57 Malignant neoplasm of all other and unspecified sites	Male	175	4	14	4	2	6	45	7	9	1	8	50	4	10	2	9
	Female	179	5	15	5	5	6	41	2	12	3	53	5	7	4	10	7
A Other digestive organs (155-159)	Male	77	1	8	3	1	3	15	3	4	6	18	2	5	5	4	10
	Female	69	3	5	1	2	2	13	1	6	3	23	5	5	3	2	2
B Other respiratory organs (160, 164, 165)	Male	7	.....	.....	.....	.....	.....	2	1	.....	.....	4	.....	.....	.....	.....	.....
	Female	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
C Urinary organs (180, 181)	Male	42	1	3	1	.....	2	16	2	1	.....	2	13	.....	1	.....	.....
	Female	15	.....	3	1	.....	.....	5	.....	.....	1	2	1	.....	.....	.....	2
D Brain and other parts of nervous system (193)	Male	14	.....	1	.....	.....	.....	4	.....	2	1	.....	4	.....	2	.....	.....
	Female	18	1	3	1	1	1	2	.....	.....	1	.....	6	1	1	.....	.....
E Other	Male	35	2	2	.....	1	1	8	1	2	.....	11	1	2	2	2	2
	Female	73	1	3	2	2	3	20	1	6	2	2	22	3	1	1	4
A 58 Leukaemia and aleukaemia	Male	44	1	3	3	3	3	12	.....	3	1	3	6	3	2	.....	1
	Female	27	1	2	1	.....	.....	9	1	1	.....	2	5	1	.....	2	1
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	Male	41	.....	3	1	3	1	7	4	3	.....	2	13	.....	1	1	2
	Female	26	2	.....	1	1	.....	6	.....	2	.....	2	10	1	.....	.....	1
A Hodgkin's disease (201)	Male	12	.....	1	1	1	.....	1	1	.....	.....	.....	5	.....	1	.....	1
	Female	9	1	.....	1	.....	.....	2	.....	1	.....	.....	3	.....	.....	.....	1
B Other	Male	29	.....	2	.....	2	1	6	3	3	.....	2	8	.....	.....	1	1
	Female	17	1	.....	1	.....	.....	4	.....	1	.....	2	7	1	.....	.....	.....
A 60 Benign neoplasms and neoplasms of unspecified nature	Male	8	.....	.....	.....	.....	1	1	.....	.....	.....	1	4	.....	.....	.....	1
	Female	12	1	2	.....	.....	1	1	1	.....	.....	1	4	1	.....	.....	.....
III., IV. ALLERGIC DISORDERS AND ENDOCRINE METABOLIC AND BLOOD DISEASES	Total	246	18	11	6	2	6	47	12	8	6	18	70	10	12	4	16
	Male	130	8	8	2	1	5	24	8	4	3	8	36	6	8	1	8
	Female	116	10	3	4	1	1	23	4	4	3	10	34	4	4	3	8
A 61 Nontoxic goitre	Male	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Female	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
A 62 Thyrotoxicosis with or without goitre	Male	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Female	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....
A 63 Diabetes mellitus	Male	64	6	3	.....	1	1	12	5	3	1	5	22	1	1	1	2
	Female	77	7	3	3	1	1	16	2	3	1	9	22	3	1	1	4
A 64 Avitaminosis and other deficiency states	Male	4	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....
	Female	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
A 65 Anaemias	Male	12	1	.....	.....	.....	.....	2	.....	.....	.....	1	2	2	2	.....	2
	Female	7	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	1	2
A 66 Allergic disorders; all other endocrine, metabolic and blood diseases	Male	48	1	5	2	.....	4	6	3	1	2	2	11	2	5	.....	4
	Female	26	3	.....	1	.....	.....	5	.....	.....	1	2	10	1	1	1	.....
V. MENTAL, PSYCHONEUROTIC, AND PERSONALITY DISORDERS	Total	17	1	.....	1	.....	2	1	.....	.....	.....	3	9	.....	.....	.....	.....
	Male	13	1	.....	.....	.....	1	.....	.....	.....	.....	3	8	.....	.....	.....	.....
	Female	4	.....	.....	1	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....
A 67 Psychoses	Male	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
	Female	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
A 68 Psychoneuroses and disorders of personality	Male	7	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Female	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
A 69 Mental deficiency	Male	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	Female	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS	Total	1042	45	52	31	17	44	235	53	69	18	60	264	33	46	16	59
	Male	579	25	33	14	11	25	119	31	41	13	29	140	21	27	11	39
	Female	463	20	19	17	6	19	116	22	28	5	31	124	12	19	5	20
A 70 Vascular lesions affecting central nervous system	Male	525	22	32	13	11	23	111	29	40	12	26	123	18	23	11	31
	Female	414	17	17	15	6	17	104	20	26	5	30	108	11	18	5	15
A 71 Nonmeningococcal meningitis	Male	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....
	Female	10	.....	.....	.....	.....	.....	2	1	.....	.....	.....	5	.....	.....	.....	1
A 72 Multiple sclerosis	Male	11	1	.....	.....	.....	.....	1	.....	.....	1	1	5	.....	1	.....	1
	Female	10	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	3	.....	.....	.....	.....
A 73 Epilepsy	Male	8	.....	.....	.....	.....	.....	1	1	.....	.....	.....	2	.....	1	.....	3
	Female	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3	.....	.....	.....	1
A 77 Otitis media and mastoiditis	Male	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Female	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
A 78 All other diseases of the nervous system and sense organs	Male	30	2	1	.....	.....	2	6	1	1	.....	2	9	2	1	.....	3
	Female	22	3	2	2	.....	2	3	1	1	.....	.....	5	1	.....	.....	2
VII. DISEASES OF THE CIRCULATORY SYSTEM	Total	2630	108	161	67	49	106	531	112	172	40	206	700	83	121	37	137
	Male	1765	64	109	41	35	80	334	71	122	31	130	459	54	96	33	106
	Female	865	44	52	26	14	26	197	41	50	9	76	241	29	25	4	31
A 79 Rheumatic fever	Male	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	Female	3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1
A 80 Chronic rheumatic heart disease	Male	59	.....	4	.....	1	1	13	3	4	.....	4	17	4	3	1	4
	Female	38	3	2	3	.....	.....	9	2	1	.....	2	11	2	.....	.....	3

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1957—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No.													
			1	2	3	4	5	6	7	8	9	10	11	12	13	14
A 81 Arteriosclerotic and degenerative heart disease	Male	1402	51	87	36	30	66	260	54	99	26	111	365	43	75	28
	Female	585	35	36	14	9	14	141	28	32	7	56	160	22	12	3
A 82 Other diseases of heart	Male	80	3	2	1	4	3	13	10	2	1	5	11	3	2	1
	Female	48	1	3	1	3	3	10	2	5	1	2	13	2	4	1
A 83 Hypertension with heart disease	Male	69	1	6	2	2	18	1	1	3	4	19	2	5	...	6
	Female	90	1	9	4	2	6	19	7	3	2	4	24	2	4	...
A 84 Hypertension without mention of heart	Male	29	1	1	...	...	2	4	1	3	1	1	9	...	2	1
	Female	25	...	...	...	...	1	2	1	4	...	2	10	...	2	3
A 85 Diseases of arteries	Male	102	7	9	1	...	5	22	4	6	...	4	28	2	7	7
	Female	61	3	3	1	...	2	12	1	4	...	7	21	1	2	4
A 86 Other diseases of circulatory system	Male	22	2	1	1	...	1	3	...	1	...	1	9	...	2	1
	Female	15	1	2	1	2	...	3	...	...	...	3	2	...	1	...
VIII. DISEASES OF THE RESPIRATORY SYSTEM	Total	620	17	27	21	6	15	120	26	32	8	41	153	49	28	15
	Male	384	8	16	11	5	11	79	19	18	7	27	93	25	19	12
	Female	236	9	11	10	1	4	41	7	14	1	14	60	24	9	3
A 87 Acute upper respiratory infections	Male	8	...	1	...	...	...	1	1	1	1	...	1	1	...	1
	Female	4	...	...	1	...	1	...	...	...	...	...	2	...	...	...
A 88 Influenza	Male	68	2	1	1	1	4	5	10	2	...	8	15	7	5	1
	Female	67	4	4	4	1	...	3	3	5	...	5	15	12	2	1
A 89 Lobar pneumonia	Male	22	...	...	2	...	1	6	...	3	1	...	5	3	...	1
	Female	19	1	1	...	...	...	4	...	...	...	...	2	5	4	1
A 90 Bronchopneumonia	Male	130	2	6	4	3	3	32	2	6	2	12	31	8	1	3
	Female	77	2	3	3	...	1	18	3	6	...	4	16	5	4	1
A 91 Primary atypical, other and unspecified pneumonia	Male	59	2	1	3	3	...	15	1	...	2	1	9	2	4	12
	Female	45	2	2	2	...	1	8	1	1	1	2	13	3	...	8
A 92 Acute bronchitis	Male	8	...	...	...	...	...	1	1	...	...	...	5	...	1	2
	Female	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A 93 Bronchitis, chronic and unqualified	Male	32	1	4	...	...	...	6	...	3	...	1	11	2	2	1
	Female	2	...	...	...	...	2	...	...	...	...	...	...	...	...	...
A 94 Hypertrophy of tonsils and adenoids	Male	2	...	...	...	1	...	1	...	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...
A 95 Empyema and abscess of lung	Male	4	...	...	...	...	...	1	...	...	...	1	1	...	1	...
	Female	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
A 96 Pleurisy	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...
A 97 All other respiratory diseases	Male	51	1	3	1	...	...	12	4	3	1	4	16	2	2	1
	Female	13	...	...	...	...	1	4	...	2	...	...	4	...	...	1
IX. DISEASES OF THE DIGESTIVE SYSTEM	Total	285	6	14	5	2	17	65	16	19	6	24	56	11	11	8
	Male	180	3	10	5	2	11	46	7	13	3	15	37	6	3	13
	Female	105	3	4	...	...	6	19	9	6	3	9	19	5	8	2
A 99 Ulcer of stomach	Male	16	...	...	1	...	1	4	1	2	...	1	3	1	...	1
	Female	5	...	...	...	...	...	1	1	...	...	...	1	1	...	...
A100 Ulcer of duodenum	Male	26	...	...	...	...	2	8	1	1	1	2	5	2	1	2
	Female	4	...	...	...	...	...	2	1	...	...	...	1	...	...	...
A101 Gastritis and duodenitis	Male	3	...	...	1	...	1	...	1	...	...	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A102 Appendicitis	Male	12	...	...	...	...	2	2	...	...	...	2	...	...	...	2
	Female	3	...	...	...	...	1	...	...	...	...	...	...	...	...	...
A103 Intestinal obstruction and hernia	Male	14	2	...	...	...	...	3	2	...	...	2	...	5	1	...
	Female	14	...	...	...	...	...	2	4	1	...	2	3	...	2	...
A104 Gastro-enteritis and colitis, except diarrhoea of the newborn	Male	27	...	3	1	...	...	6	...	2	1	4	3	...	1	...
	Female	32	...	2	...	...	4	4	1	3	1	2	1	4	4	6
A105 Cirrhosis of liver	Male	25	...	2	...	...	1	7	...	1	1	1	9	...	1	1
	Female	18	1	1	...	...	2	4	1	...	1	1	6	...	...	3
A106 Cholelithiasis and cholecystitis	Male	18	1	1	1	1	2	3	2	2	...	...	3	1	...	1
	Female	15	1	1	...	...	1	2	...	2	1	3	2	...	...	2
A107 Other diseases of digestive system	Male	39	...	4	1	1	2	13	2	3	...	5	5	1	...	1
	Female	14	1	...	...	...	...	4	1	...	...	1	3	...	2	1
X. DISEASES OF THE GENITO-URINARY SYSTEM	Total	133	7	5	5	...	4	37	10	5	...	11	32	4	2	3
	Male	94	7	5	5	...	2	26	7	3	...	7	21	2	1	3
	Female	39	...	...	...	...	2	11	3	2	...	4	11	2	1	...
A108 Acute nephritis	Male	2	...	...	...	...	...	1	1	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...
A109 Chronic, other and unspecified nephritis	Male	31	2	2	1	...	...	12	1	1	...	1	8	...	1	2
	Female	26	...	...	...	...	2	7	1	2	...	4	6	1	1	...
A110 Infections of kidney	Male	21	3	1	2	...	...	2	1	2	...	2	4	1	1	1
	Female	7	...	...	...	...	...	2	1	...	...	...	4	...	...	...
A111 Calculi of urinary system	Male	5	...	1	...	...	...	3	...	...	...	...	...	...	...	1
	Female	2	...	...	...	...	...	1	...	...	...	...	...	...	...	1
A112 Hyperplasia of prostate	Male	23	...	1	2	...	...	4	3	...	...	3	8	...	...	1
	Female	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A114 Other diseases of genito-urinary system	Male	12	2	...	...	...	2	4	1	...	...	1	1	1	...	...
	Female	3	...	...	...	...	...	1	...	...	...	...	1	1	...	...

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1957—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No. 1	Division No. 2	Division No. 3	Division No. 4	Division No. 5	Division No. 6	Division No. 7	Division No. 8	Division No. 9	Division No. 10	Division No. 11	Division No. 12	Division No. 13	Division No. 14	Division No. 15
XI. DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	Total	12	...	1	1	...	1	1	...	2	...	1	2	2	...	...	1
A115 Sepsis of pregnancy, childbirth and the puerperium	Female	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
A116 Toxaemias of pregnancy and the puerperium	Female	3	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...
A117 Haemorrhage of pregnancy and childbirth	Female	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
A118 Abortion without mention of sepsis of toxæmia	Female	2	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
A119 Abortion with sepsis	Female	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
A120 Other complications of pregnancy, childbirth and the puerperium	Female	4	...	...	1	...	...	...	...	1	...	...	...	1	...	...	1
XII., XIII. DISEASES OF THE SKIN AND MUSCULO-SKELETAL SYSTEM	Total	57	3	3	2	...	3	16	2	5	1	3	5	6	3	2	3
	Male	26	1	1	...	...	2	7	1	4	...	1	1	4	1	1	2
	Female	31	2	2	2	...	1	9	1	1	1	2	4	2	2	1	1
A121 Infections of skin and subcutaneous tissue	Male	4	...	...	...	...	...	1	...	...	...	...	...	...	...	1	2
	Female	3	...	...	1	...	...	1	...	...	...	...	1	...	...	...	...
A122 Arthritis and spondylitis	Male	9	1	...	...	...	1	...	...	2	...	1	1	3	...	...	...
	Female	12	1	2	1	...	1	2	...	...	...	1	2	...	2	...	...
A124 Osteomyelitis and peritostitis	Male	3	...	...	...	...	1	...	...	1	...	...	...	1	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A126 All other diseases of skin and musculoskeletal system	Male	10	...	1	...	...	...	6	1	1	...	1	...	...	1	...	...
	Female	16	1	...	...	...	...	6	1	1	1	1	1	2	...	1	1
XIV. CONGENITAL MALFORMATIONS	Total	189	5	6	7	1	7	39	7	8	1	14	69	8	3	2	12
	Male	108	3	2	3	...	6	23	5	4	1	10	41	4	2	...	4
	Female	81	2	4	4	1	1	16	2	4	...	4	28	4	1	2	8
A127 Spina bifida and meningocele	Male	7	...	...	...	...	...	2	...	...	...	...	4	1	...	...	...
	Female	5	...	...	...	...	...	1	...	...	...	1	1	2	...	...	...
A128 Congenital malformations of circulatory system	Male	43	1	1	2	...	3	10	1	2	1	5	12	2	1	...	2
	Female	33	1	2	...	1	1	6	1	2	...	2	14	1	1	...	1
A129 All other congenital malformations	Male	58	2	1	1	...	3	11	4	2	...	5	25	1	1	...	2
	Female	43	1	2	4	...	...	9	1	2	...	1	13	1	...	2	7
XV. CERTAIN DISEASES OF EARLY INFANCY	Total	541	14	28	18	9	16	102	15	35	8	25	156	30	16	17	52
	Male	300	5	20	7	7	8	51	9	24	5	17	85	13	9	7	33
	Female	241	9	8	11	2	8	51	6	11	3	8	71	17	7	10	19
A130 Birth injuries	Male	46	...	1	1	1	1	6	4	2	1	3	14	2	1	3	7
	Female	39	4	1	2	...	...	11	1	...	1	3	13	2	...	...	1
A131 Postnatal asphyxia and atelectasis	Male	93	4	11	2	1	1	14	1	9	2	8	28	3	4	1	4
	Female	62	3	3	3	1	3	10	...	3	...	1	23	3	3	2	4
A132 Infections of the newborn	Male	24	...	...	...	1	...	3	...	2	...	...	10	1	...	1	6
	Female	16	...	1	...	...	2	2	...	...	...	...	6	1	...	1	3
A133 Haemolytic disease of newborn	Male	16	...	3	1	2	...	1	...	2	1	2	2	...	...	...	2
	Female	7	...	...	...	...	...	1	1	...	...	...	2	1	...	2	...
A134 All other defined diseases of early infancy	Male	10	...	1	...	...	...	2	...	...	...	...	3	1	...	1	2
	Female	11	...	...	...	...	...	3	...	...	1	...	2	1	...	2	2
A135 Ill-defined diseases peculiar to early infancy, and immaturity unqualified	Male	111	1	4	3	2	6	25	4	9	1	5	28	6	4	1	12
	Female	106	2	3	6	1	3	24	4	8	1	4	25	9	4	3	9
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS	Total	308	1	1	5	1	3	180	11	8	2	5	67	6	7	1	10
	Male	199	...	1	3	...	2	122	5	5	2	3	45	5	2	1	3
	Female	109	1	...	2	1	1	58	6	3	...	2	22	1	5	...	7
A136 Senility without mention of psychosis	Male	10	...	...	...	...	...	2	...	1	...	...	5	2	...	...	...
	Female	23	1	...	...	1	1	6	...	1	...	1	8	...	2	...	2
A137 Ill-defined and unknown causes	Male	189	...	1	3	...	2	120	5	4	2	3	40	3	2	1	3
	Female	86	...	...	2	...	...	52	6	2	...	1	14	1	3	...	5
EXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO EXTERNAL CAUSE)	Total	745	22	49	16	13	29	123	32	37	15	49	199	39	34	18	70
	Male	586	18	36	14	10	25	96	28	29	12	40	157	33	21	13	55
	Female	159	4	13	2	3	4	28	4	8	3	9	42	6	13	5	15
AE138 Motor vehicle accidents	Male	204	8	18	5	3	13	29	12	14	4	16	54	8	3	2	15
	Female	43	3	3	1	2	1	8	1	4	...	1	10	1	2	1	5
A Traffic accidents (810-825)	Male	189	8	16	4	2	13	24	10	14	4	16	52	7	2	2	15
	Female	41	3	3	1	2	1	7	1	4	...	1	10	1	1	1	5
B Non-traffic accidents	Male	15	...	2	1	1	...	5	2	...	...	...	2	1	1	...	...
	Female	2	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1957—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No.														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AE139 Other transport accidents	Male	36	3	2	1	9	1	1	1	1	10	3	1	5			
	Female	3	1	1	1	1	1	1	1	1	1	7	3	4	4		
AE140 Accidental poisoning	Male	28	1	1	1	4	2	1	1	1	1	7	3	4	4		
	Female	7	1	1	1	1	1	1	1	1	1	3	1	1	2		
AE141 Accidental falls	Male	51	4	4	1	10	1	1	8	16	1	2	1	3			
	Female	41	1	3	2	8	1	2	4	13	1	3	1	2			
AE142 Accident caused by machinery	Male	32	1	1	2	2	1	1	1	4	9	3	4	2	2		
	Female	2				1								1			
AE143 Accident caused by fire and explosion of combustible material	Male	21	1	1	1	1	2	1	1	1	6		6		2		
	Female	15				1		1			1	3	7		3		
AE144 Accident caused by hot substance, corrosive liquid, steam, and radiation	Male	3				1		1					1				
	Female	1											1				
AE145 Accident caused by firearm	Male	14	1	1	1			2		1	1	1	1	2		3	
	Female																
AE146 Accidental drowning and submersion	Male	36	1	2		3	8	1	2	2	2	4	6	1	1	3	
	Female	7		3		1	1						1	1			
AE147 All other accidental causes	Male	69		1	1	3	2	9	6	3	3	3	25	3	3	1	6
	Female	16		1	1		2		1	1	1	5				1	3
AE148 Suicide and self-inflicted injury	Male	85	2	5	2	1	5	19	4	4	2	3	22	3	2	11	
	Female	20			1		6	1	1	1		5	2		1	2	
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Male	6							1	1		3			1		
	Female	4									1	2					
AE150 Injury resulting from operations of war	Male	1															1
	Female																
NXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO NATURE OF INJURY)	Total	745	22	49	16	13	29	123	32	37	15	49	199	39	34	18	70
	Male	586	18	36	14	10	25	95	28	29	12	40	157	33	21	13	55
	Female	159	4	13	2	3	4	28	4	8	3	9	42	6	13	5	15
AN138 Fracture of skull	Male	110	2	7	2	2	9	25	10	3	2	12	24	3	2	2	5
	Female	17	2	2			4	1	1		2	4					1
AN139 Fracture of spine and trunk	Male	29	2	1	1	1		2	1		1	2	11	1		1	5
	Female	4				1						3					
AN140 Fracture of limbs	Male	27	2	3	1			5	2			4	6		2		2
	Female	36	1	3			2	9		2	4	9		3	1		2
AN143 Head injury (excluding fracture)	Male	84	4	8	2	3	9	5	4	2	5	24	7	2	1	8	
	Female	15	1				3			2		6			2		1
AN144 Internal injury of chest, abdomen, and pelvis	Male	134	5	7	5	1	5	16	2	13	3	12	38	8	4	2	13
	Female	24		2	1	1	1	2	1	1		1	5	2	2	1	4
AN145 Laceration and open wounds	Male	9						3	1	1	1			1	1		
	Female	3									1						2
AN146 Superficial injury, contusion and crushing with intact skin surface	Male	1					1										
	Female	2							1					1			
AN147 Effects of foreign body entering through orifice	Male	13				2		3	1	1				1	1		2
	Female	6									1		3			1	1
AN148 Burns	Male	23	1	3	1	1	1	3		1			6	1	4		3
	Female	17		1			1	1					4		7		7
AN149 Effects of poisons	Male	45		1		1	1	6	2	2		2	13	3	3	4	
	Female	16		2		1		3	1		1	1	5	2			
AN150 All other and unspecified effects of external causes	Male	111	2	6	2	2	5	23	4	4	3	3	33	8	2	2	12
	Female	19		3	1		1	6		2			3	1	1		1

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1957

CAUSE OF DEATH (Intermediate List)	SEX	Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
ALL CAUSES	Total	3869	25	1488	77	1626	52	62	234	209	96
	Male	2337	14	892	40	1004	34	36	138	113	66
	Female	1532	11	596	37	622	18	26	96	96	30
I. INFECTIVE AND PARASITIC DISEASES	Total	53	2	14	...	29	...	3	5	...	...
	Male	34	2	13	...	17	...	1	1	...	...
	Female	19	...	1	...	12	...	2	4	...	...
A 1 Tuberculosis of respiratory system	Male	20	1	6	...	12	...	...	1	...	...
	Female	7	...	...	...	7	...	...	...	...	...
A 2 Tuberculosis of meninges and central nervous system	Male	1	...	...	...	1	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 5 Tuberculosis, all other forms	Male	1	...	1	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	...	1	...	...
A 10 All other syphilis	Male	5	...	2	...	3	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 20 Septicaemia and pyaemia	Male	...	...	...	...	1	...	...	...	...	...
	Female	2	...	...	...	1	...	...	1	...	...
A 21 Diphtheria	Male	1	...	...	...	1	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 23 Meningococcal infections	Male	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	1	...	...	...
A 28 Acute poliomyelitis	Male	1	...	...	...	...	...	1	...	...	...
	Female	1	...	...	...	...	...	...	1	...	...
A 29 Acute infectious encephalitis	Male	1	...	1	...	1	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	...
A 32 Measles	Male	2	1	1	...	...	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 34 Infectious hepatitis	Male	1	...	1	...	...	...	...	...	...	...
	Female	4	...	1	...	1	...	1	1	...	...
A 43 All other diseases classified as infective and parasitic	Male	1	...	1	...	...	...	...	...	...	...
	Female	2	...	...	...	1	...	...	1	...	...
II. NEOPLASMS	Total	657	2	259	11	281	6	11	44	23	20
	Male	351	1	141	2	156	5	6	18	9	13
	Female	306	1	118	9	125	1	5	26	14	7
A 44 Malignant neoplasms of buccal cavity and pharynx	Male	4	...	1	...	3	...	...	...	...	...
	Female	3	...	2	...	...	...	...	1	...	...
A 45 Malignant neoplasm of oesophagus	Male	6	...	2	...	3	...	...	1	...	...
	Female	4	...	3	...	1	...	...	...	...	...
A 46 Malignant neoplasm of stomach	Male	46	...	12	...	25	...	1	5	1	2
	Female	23	...	8	...	10	...	...	2	3	...
A 47 Malignant neoplasm of intestine, except rectum	Male	39	...	16	1	16	1	2	...	...	3
	Female	29	...	12	1	12	1	...	2	1	...
A 48 Malignant neoplasm of rectum	Male	19	...	7	...	7	1	1	2	1	...
	Female	10	...	2	1	5	...	...	1	...	1
A 49 Malignant neoplasm of larynx	Male	5	...	1	...	3	...	...	1	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 50 Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	Male	53	1	25	...	22	...	...	3	2	...
	Female	5	...	4	...	1	...	...	...	...	...
A 51 Malignant neoplasm of breast	Male	2	...	1	...	1	...	...	...	...	...
	Female	63	...	25	3	31	...	...	4	...	...
A 52 Malignant neoplasm of cervix uteri	Female	17	...	5	...	6	...	2	3	1	...
A 53 Malignant neoplasm of other and unspecified parts of uterus	Female	6	...	3	...	2	...	...	...	1	...
A 54 Malignant neoplasm of prostate	Male	36	...	15	1	14	1	...	...	1	4
	Female	4	...	1	...	1	1	...	...	...	...
A 55 Malignant neoplasm of skin	Male	1	...	1	...	...	...	...	...	...	...
	Female	3	...	3	...	2	...	...	...	...	...
A 56 Malignant neoplasm of bone and connective tissue	Male	2	...	...	...	2	...	...	...	...	...
	Female	2	...	...	...	2	...	...	...	...	...
A 57 Malignant neoplasm of all other unspecified sites	Male	92	...	39	...	44	...	...	5	2	2
	Female	101	1	36	2	40	...	2	11	4	5
A Other digestive organs (155-159)	Male	31	...	13	...	15	...	...	...	...	1
	Female	41	1	11	1	16	...	2	5	3	2
B Other respiratory organs (160, 164, 165)	Male	6	...	2	...	4	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
C Urinary organs (180, 181)	Male	26	...	13	...	11	...	...	1	1	...
	Female	8	...	4	...	2	...	...	2	...	...
D Brain and other parts of nervous system (193)	Male	9	...	4	...	4	...	...	...	...	1
	Female	10	...	2	...	5	...	...	...	...	...
E Other	Male	20	...	7	...	10	...	...	2	1	...
	Female	41	...	18	1	17	...	...	2	1	3
A 58 Leukaemia and aleukaemia	Male	20	...	11	...	4	...	...	2	1	2
	Female	16	...	9	...	4	...	1	1	...	1

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1957 (Continued)

CAUSE OF DEATH (Intermediate List)	SEX	Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	Male	18	...	6	...	10	1	1	...	...	...
	Female	19	...	6	2	9	...	...	...	2	...
A Hodgkin's disease	Male	4	...	1	...	2	...	1	...	...	...
(201)	Female	5	...	2	...	2	...	...	...	1	...
B Other	Male	14	...	5	...	8	1	...	...	...	...
	Female	14	...	4	2	7	...	...	...	1	...
A 60 Benign neoplasms and neoplasms of unspecified nature	Male	4	...	1	...	3	...	...	...	...	...
	Female	6	...	1	...	2	...	...	2	1	...
III., IV. ALLERGIC DISORDERS AND ENDOCRINE METABOLIC AND BLOOD DISEASES	Total	105	...	39	...	46	2	...	3	14	1
	Male	51	...	19	...	23	2	...	2	5	...
	Female	54	...	20	...	23	...	...	1	9	1
A 61 Nontoxic goitre	Male	1	...	1	...	...	...	...	...	...	...
	Female	1	...	...	...	1	...	...	...	...	...
A 63 Diabetes mellitus	Male	30	...	10	...	15	...	...	1	4	...
	Female	38	...	15	...	15	...	...	1	7	...
A 64 Avitaminosis and other deficiency states	Male	3	...	3	...	...	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 65 Anaemias	Male	2	...	1	...	1	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 66 Allergic disorders; all other endocrine, metabolic and blood diseases	Male	15	...	4	...	7	2	...	1	2	...
	Female	14	...	4	...	7	...	...	...	2	1
V. MENTAL, PSYCHONEUROTIC, AND PERSONALITY DISORDERS	Total	9	...	1	...	7	...	...	...	1	...
	Male	8	...	...	...	7	...	...	...	1	...
	Female	1	...	1	...	...	...	...	...	...	...
A 67 Psychoses	Male	1	...	...	...	...	...	...	...	1	...
	Female	1	...	1	...	...	...	...	...	...	...
A 68 Psychoneuroses and disorders of personality	Male	5	...	...	...	5	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 69 Mental deficiency	Male	2	...	...	...	2	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS	Total	484	2	202	14	182	7	4	27	35	11
	Male	254	...	101	7	98	4	2	15	18	9
	Female	230	2	101	7	84	3	2	12	17	2
A 70 Vascular lesions affecting central nervous system	Male	229	...	93	7	84	4	2	15	16	8
	Female	208	2	89	7	77	3	2	11	15	2
A 71 Nonmeningococcal meningitis	Male	1	...	...	...	1	...	...	...	...	...
	Female	5	...	2	...	3	...	...	...	...	...
A 72 Multiple sclerosis	Male	6	...	1	...	4	...	...	...	1	...
	Female	9	...	6	...	3	...	...	...	...	...
A 73 Epilepsy	Male	3	...	1	...	2	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 77 Otitis media and mastoiditis	Male	...	...	...	...	...	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 78 All other diseases of the nervous system and sense organs	Male	15	...	6	...	7	...	...	...	1	1
	Female	7	...	3	...	1	...	...	1	2	...
VII. DISEASES OF THE CIRCULATORY SYSTEM	Total	1245	5	419	24	557	16	14	95	83	32
	Male	783	4	252	15	361	12	8	63	46	22
	Female	462	1	167	9	196	4	6	32	37	10
A 79 Rheumatic fever	Male	1	...	...	...	1	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 80 Chronic rheumatic heart disease	Male	21	...	7	...	11	1	1	1	...	...
	Female	18	...	7	...	9	...	...	...	2	...
A 81 Arteriosclerotic and degenerative heart disease	Male	628	4	196	15	287	9	6	55	38	18
	Female	329	...	124	8	128	3	5	25	29	7
A 82 Other diseases of heart	Male	23	...	10	...	10	...	...	...	2	1
	Female	19	...	8	...	9	...	...	...	1	1
A 83 Hypertension with heart disease	Male	31	...	13	...	16	...	...	2	...	...
	Female	49	1	16	...	23	...	...	7	1	1
A 84 Hypertension without mention of heart	Male	13	...	3	...	6	1	1	1	...	...
	Female	8	...	1	...	6	1	...	...	...	...
A 85 Diseases of arteries	Male	53	...	21	...	22	1	...	4	3	2
	Female	33	...	8	1	19	...	1	...	3	1
A 86 Other diseases of circulatory system	Male	13	...	2	...	8	...	...	...	2	1
	Female	5	...	2	...	2	...	...	...	1	...
VIII. DISEASES OF THE RESPIRATORY SYSTEM	Total	257	2	99	9	107	...	4	16	12	8
	Male	162	1	66	6	68	...	2	8	7	4
	Female	95	1	33	3	39	...	2	8	5	4
A 87 Acute upper respiratory infections	Male	3	...	1	...	1	...	...	1	...	...
	Female	2	...	...	...	2	...	...	...	...	...

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1957 (Continued)

CAUSE OF DEATH (Intermediate List)	SEX	Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
A 88 Influenza	Male	19	...	4	2	10	...	...	2	1	...
	Female	22	...	2	1	10	...	1	3	3	...
A 89 Lobar pneumonia	Male	9	...	5	...	3	...	...	...	...	1
	Female	8	...	3	1	3	...	...	1	...	...
A 90 Bronchopneumonia	Male	52	...	25	2	19	...	1	3	1	1
	Female	26	1	16	...	5	...	...	2	1	1
A 91 Primary atypical, other and unspecified pneumonia	Male	24	1	13	...	7	...	1	...	2	...
	Female	21	...	6	...	13	...	...	1	1	...
A 92 Acute bronchitis	Male	4	...	...	...	4	...	...	...	...	...
	Female	4	...	1	...	2	...	1	...	...	...
A 93 Bronchitis, chronic and unqualified	Male	20	...	6	...	10	...	...	2	1	1
	Female	1	...	1	...	...	...	...	...	...	...
A 94 Hypertrophy of tonsils and adenoids	Male	1	...	1	...	...	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 95 Empyema and abscess of lung	Male	2	...	1	...	1	...	...	...	...	...
	Female	1	...	...	...	...	...	...	1	...	...
A 97 All other respiratory diseases	Male	28	...	10	2	13	...	...	2	1	...
	Female	9	...	4	...	4	...	...	...	...	1
IX. DISEASES OF THE DIGESTIVE SYSTEM	Total	113	1	49	6	42	2	2	5	5	1
	Male	75	...	34	3	28	1	...	5	3	1
	Female	38	1	15	3	14	1	2	...	2	...
A 99 Ulcer of stomach	Male	4	...	3	...	1	...	...	...	...	...
	Female	2	...	1	...	...	...	...	...	...	...
A100 Ulcer of duodenum	Male	10	...	5	1	4	...	...	...	...	...
	Female	3	...	2	...	1	...	...	...	...	...
A102 Appendicitis	Male	6	...	2	...	3	1	...	...	...	...
	Female	1	...	...	...	1	...	...	...	...	...
A103 Intestinal obstruction and hernia	Male	7	...	1	...	4	...	...	2	...	...
	Female	5	...	2	...	3	...	...	...	...	...
A104 Gastro-enteritis and colitis, except diarrhoea of the newborn	Male	9	...	4	2	2	...	...	1	...	...
	Female	5	1	2	...	1	1	...	...	...	...
A105 Cirrhosis of liver	Male	18	...	7	...	9	...	...	2	...	...
	Female	9	...	3	...	4	...	1	...	1	...
A106 Cholelithiasis and cholecystitis	Male	5	...	2	...	2	...	...	...	1	...
	Female	7	...	2	3	1	...	1	...	...	...
A107 Other diseases of digestive system	Male	16	...	10	...	3	...	...	2	...	1
	Female	6	...	3	...	2	...	...	...	1	...
X. DISEASES OF THE GENITO-URINARY SYSTEM	Total	65	1	28	...	23	...	1	4	7	1
	Male	48	1	20	...	14	...	1	4	7	1
	Female	17	...	8	...	9	...	...	...	...	...
A108 Acute nephritis	Male	1	...	1	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	...
A109 Chronic, other and unspecified nephritis	Male	19	1	8	...	5	...	1	2	2	...
	Female	9	...	5	...	4	...	...	...	...	...
A110 Infections of kidney	Male	9	...	1	...	3	...	...	1	3	1
	Female	5	...	1	...	4	...	...	...	...	...
A111 Calculi of urinary system	Male	4	...	3	...	...	...	...	1	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A112 Hyperplasia of prostate	Male	8	...	3	...	5	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A114 Other diseases of genito-urinary system	Male	7	...	4	...	1	...	...	...	2	...
	Female	2	...	1	...	1	...	...	...	...	...
XI. DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	Total	2	...	...	...	1	...	...	...	...	1
A118 Abortion without mention of sepsis or toxæmia	Female	1	...	...	...	1	...	...	...	...	...
A120 Other complications of pregnancy, childbirth and the puerperium	Female	1	...	...	...	...	...	...	...	...	1
XII., XIII. DISEASES OF THE SKIN AND MUSCULO-SKELETAL SYSTEM	Total	22	...	13	1	3	...	...	1	3	1
	Male	8	...	5	...	...	...	...	1	1	1
	Female	14	...	8	1	3	...	...	...	2	...
A121 Infections of skin and subcutaneous tissue	Male	1	...	1	...	...	...	...	...	...	...
	Female	2	...	1	...	1	...	...	...	...	...
A122 Arthritis and spondylitis	Male	1	...	...	...	...	...	...	...	1	...
	Female	4	...	2	...	1	...	...	...	1	...
A126 All other diseases of skin and musculo-skeletal system	Male	6	...	4	...	...	...	...	1	...	1
	Female	8	...	5	1	1	...	...	...	1	...

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1957 (Continued)

CAUSE OF DEATH (Intermediate List)	SEX	Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
XIV. CONGENITAL MALFORMATIONS	Total	103		34	2	54		2	4	4	3
	Male	59		20		33		1		3	1
	Female	44		14	2	21		1	4	1	2
A127 Spina bifida and meningocele	Male	4		1		3					
	Female	2		1							
A128 Congenital malformations of circulatory system	Male	19		8		8		1		1	1
	Female	18		5		9		1	2		1
A129 All other congenital malformations	Male	36		11	1	22			2		
	Female	24		8		12			2	1	1
XV. CERTAIN DISEASES OF EARLY INFANCY	Total	233	3	80	3	110	6	10	12	6	8
	Male	123	2	38	2	58	2	8	9	2	7
	Female	110	1	42	1	52	4	2	3	4	1
A130 Birth injuries	Male	19		4		10	2	2	1		
	Female	22		8		10	1		1	2	
A131 Postnatal asphyxia and atelectasis	Male	45		10		21		2	6	1	5
	Female	30		8		16		2	2		
A132 Infections of the newborn	Male	9		2		7					
	Female	5		1		3	1				
A133 Haemolytic disease of newborn	Male	5		1	1	2			1		
	Female	2	1			1					
A134 All other defined diseases of early infancy	Male	4		2		2					
	Female	4		2		2					
A135 Ill-defined diseases peculiar to early infancy, and immaturity unqualified.	Male	46	2	19	1	16		4	1	1	2
	Female	47		23	1	20	2				1
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS	Total	225	4	159	1	53	1	3	1	1	2
	Male	155	2	111	1	38		1	1	1	1
	Female	70	2	48		15	1	2		1	1
A136 Senility without mention of psychosis	Male	7		2		4					1
	Female	14		6		6				1	1
A137 Ill-defined and unknown causes	Male	148	2	109	1	34		1	1		
	Female	56	2	42		9	1	2			
EXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO EXTERNAL CAUSE)	Total	291	3	92	6	131	12	8	17	15	7
	Male	221	1	72	3	103	8	6	11	11	6
	Female	70	2	20	3	28	4	2	6	4	1
AE138 Motor vehicle accidents	Male	72	1	19	1	34	2	2	3	5	5
	Female	20		7		5	2		2	3	1
A Traffic accidents (810-825)	Male	69	1	17	1	34	2	1	3	5	5
	Female	20		7		5	2		2	3	1
B Non-traffic accidents	Male	3		2				1			
	Female										
AE139 Other transport accidents	Male	19		9		7			3		
	Female	2	1						1		
AE140 Accidental poisoning	Male	9		4		4			1		
	Female	2				1			1		
AE141 Accidental falls	Male	28		9	1	12			3	3	
	Female	24		6	3	11	1		2	1	
AE142 Accident caused by machinery	Male	3				3					
	Female										
AE143 Accident caused by fire and explosion of combustible material	Male	6		1		4	1				
	Female	3		1				2			
AE144 Accident caused by hot substance, corrosive liquid, steam and radiation	Male	1		1							
	Female	1				1					
AE145 Accident caused by firearm	Male	4		1			1	1		1	
	Female										
AE146 Accidental drowning and submersion	Male	10		5		3	1			1	
	Female	1	1								
AE147 All other accidental causes	Male	24		5	1	14	1	2	1		
	Female	5		1		4					
AE148 Suicide and self-inflicted injury	Male	41		18		19	2	1		1	
	Female	10		5		4	1				
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Male	4				3					1
	Female	2				2					
XXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO NATURE OF INJURY)	Total	291	3	92	6	131	12	8	17	15	7
	Male	221	1	72	3	103	8	6	11	11	6
	Female	70	2	20	3	28	4	2	6	4	1
AN138 Fracture of skull	Male	45	1	18	1	20	1	1	1	1	1
	Female	11	1	3	1	2			1	2	1

BUREAU OF VITAL STATISTICS

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1957 (Continued)

CAUSE OF DEATH (Intermediate List)	SEX										
		Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
AN139 Fracture of spine and trunk	Male	9	...	2	...	5	...	1	...	1	...
	Female	2	...	...	...	2	...	...	...	...	...
AN140 Fracture of limbs	Male	14	...	4	1	5	...	...	2	2	...
	Female	21	...	7	2	8	1	...	2	1	...
AN143 Head injury (excluding fracture)	Male	24	...	5	...	14	1	1	1	1	1
	Female	8	...	2	...	5	...	...	1	...	...
AN144 Internal injury of chest, abdomen, and pelvis	Male	44	...	12	...	20	2	1	2	4	3
	Female	7	...	1	...	3	2	...	1	...	...
AN145 Laceration and open wounds	Male	3	...	3	...	...	...	...	...	...	...
	Female	1	...	...	...	1	...	...	...	...	...
AN147 Effects of foreign body entering through orifice	Male	6	...	3	...	2	1	...	...	...	...
	Female	2	...	...	...	2	...	...	...	...	...
AN148 Burns	Male	9	...	2	...	4	...	...	3	...	...
	Female	5	...	1	...	1	...	2	1	...	...
AN149 Effects of poisons	Male	20	...	6	...	10	2	...	1	...	1
	Female	6	...	3	...	2	...	...	1	...	...
AN150 All other and unspecified effects of external causes	Male	47	...	17	1	23	1	2	1	2	...
	Female	7	1	3	...	3	...	...	...	...	...

[illegible]

[illegible]

TABLE 9 — DEATHS, BY CAUSE AND SEX, BY AGE, EDMONTON, 1957

CAUSE OF DEATH (Intermediate List)	SEX	AGE															Total									
		Under 1 year		1 year	2 years	3 years	4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years		50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85+	Not stated
I. INFECTIVE AND PARASITIC DISEASES	Total	1626	194	5	5	3	3	3	6	8	26	26	28	32	48	48	78	84	143	176	204	210	169	118		
	Male	1004	108	2	2	1	1	1	4	6	20	19	16	20	32	27	50	58	94	116	142	126	98	54		
	Female	622	86	3	3	2	2	2	2	2	6	7	12	12	16	21	28	26	49	60	62	84	71	64		
	Total	29	...	1	1	...	...	...	...	...	...	3	2	2	3	2	2	2	2	3	5	7	1	1	
	Male	17	...	...	...	...	...	...	...	...	...	1	2	...	...	...	2	2	2	2	5	2	1	...	
	Female	12	...	1	1	...	...	...	...	...	...	2	...	1	1	1	1	2	1	1	2	2	1	1	
	A 1 Tuberculosis of respiratory system	Male	12	...	...	...	...	...	...	...	...	1	2	...	...	...	1	2	1	2	2	1	...	1	
	A 2 Tuberculosis of meninges and central nervous system	Male	7	...	...	...	...	...	...	...	...	2	...	1	1	1	1	...	...	...	...	...	...	1	
	A 10 All other syphilis	Female	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...
	A 20 Septicaemia and pyaemia	Female	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
II. NEOPLASMS	Female	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A 44 Malignant neoplasm of buccal cavity and pharynx	Total	281	2	1	1	1	1	1	1	1	2	2	4	8	8	20	17	27	42	34	46	35	20	10		
	Male	156	1	1	1	1	1	1	1	1	2	1	1	2	4	10	10	15	16	23	29	27	11	7		
	Female	125	1	...	...	...	...	...	...	...	2	1	3	6	4	10	10	12	26	11	17	8	9	3	
	Male	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	...	...	...
	Female	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A 46 Malignant neoplasm of stomach	Female	25	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Male	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

TABLE 11 — DEATHS, BY CAUSE AND SEX, BY MARITAL STATUS AND AGE, AND MONTH OF DEATH, ALBERTA, 1957

[illegible]

A 57 Malignant neoplasm of all other and unspecified sites	175	6	2	1	4	12	13	38	61	1	4	32	2	5	17	13	14	15	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
A 58 Leukaemia and leukaemias	176	5	1	1	6	1	16	30	50	1	10	44	3	5	17	13	14	15	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	177	6	1	1	6	1	16	30	50	1	10	44	3	5	17	13	14	15	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
A 60 Benign neoplasms and neoplasms of unspecified nature	178	7	1	1	6	1	16	30	50	1	10	44	3	5	17	13	14	15	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
III. IV. ALLERGIC DISORDERS AND ENDOCRINE METABOLIC AND BLOOD DISEASES	179	8	1	1	6	1	16	30	50	1	10	44	3	5	17	13	14	15	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
A 61 Nontoxic goitre	180	9	1	1	6	1	16	30	50	1	10	44	3	5	17	13	14	15	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60																																								

VIII. DISEASES OF THE RESPIRATORY SYSTEM		Total	Male	Female	10	5	17	44	1	13	53	131	1	9	136	13	46	44	30	48	34	33	27	20	34	178	86	40
A 87 Acute upper respiratory infections		620	187	433	10	5	17	44	1	13	53	131	1	9	136	13	46	44	30	48	34	33	27	20	34	178	86	40
A 88 Influenza		384	102	282	5	1	13	38	1	11	24	101	1	4	70	10	26	27	21	30	25	23	17	14	22	98	56	25
A 89 Lobar pneumonia		236	85	151	5	1	4	6	1	11	19	30	1	5	66	3	20	17	9	18	9	10	10	6	12	80	30	15
A 90 Bronchopneumonia		130	41	89	2	1	18	1	1	1	3	2	1	1	23	6	15	11	11	12	7	12	8	6	8	14	19	7
A 91 Primary atypical, other and unspecified pneumonia		77	28	49	2	1	4	2	1	1	4	12	1	1	11	2	9	9	4	7	5	3	3	4	5	17	6	7
A 92 Acute bronchitis		45	23	22	1	1	4	2	1	1	2	6	1	1	12	2	4	2	3	5	1	3	4	2	11	5	3	3
A 93 Bronchitis, chronic and unqualified		8	6	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 94 Hypertrophy of tonsils and adenoids		32	11	21	1	1	1	4	1	1	5	12	1	1	7	1	2	2	3	3	1	2	3	2	9	4	3	3
A 95 Empyema and abscess of lung		2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 96 Pleurisy		1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 97 All other respiratory diseases		51	13	38	2	1	3	7	1	1	9	16	1	1	15	1	2	4	4	4	4	5	3	2	5	8	3	7
IX. DISEASES OF THE DIGESTIVE SYSTEM		285	54	231	2	2	7	20	1	12	42	64	1	10	68	5	24	17	19	22	25	23	28	25	17	30	33	22
A 99 Ulcer of stomach		160	26	134	1	1	6	16	1	8	26	51	1	5	36	5	14	13	12	16	20	7	18	15	11	19	24	13
A100 Ulcer of duodenum		105	28	77	1	1	1	4	1	4	16	13	1	1	32	10	4	7	6	5	16	12	10	6	11	9	9	9
A101 Gastritis and duodenitis		16	5	11	2	2	2	1	1	2	5	1	1	1	2	3	1	2	1	4	2	2	2	2	3	2	2	2
A102 Appendicitis		26	4	22	2	2	2	3	1	1	7	9	1	1	4	1	2	2	2	4	1	1	3	1	1	1	1	1
A103 Intestinal obstruction and hernia		3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A104 Gastro-enteritis and colitis, except diarrhoea of the newborn		14	4	10	1	1	1	1	1	2	1	2	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
A105 Cirrhosis of liver		27	17	10	2	2	1	1	1	1	1	7	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1
A106 Cholelithiasis and cholecystitis		32	22	10	1	1	1	1	1	1	1	5	1	2	4	1	4	1	3	2	2	1	3	2	1	1	1	1
A107 Other diseases of digestive system		18	1	17	1	1	1	1	1	1	1	4	1	4	5	1	2	1	1	2	3	2	1	3	1	1	1	1
		15	2	13	1	1	1	1	1	3	5	4	1	1	8	2	1	4	4	5	1	2	6	3	2	2	2	2
		39	2	37	2	2	1	3	1	3	5	15	3	1	10	1	2	1	1	5	1	2	6	3	2	2	2	1
		14	2	12	2	1	1	1	1	4	2	4	1	1	7	2	2	1	1	2	2	2	1	1	1	1	1	1

[illegible]

TABLE 12: INFANT DEATHS AND HOSPITAL INFANT DEATHS BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS, ALBERTA, 1957

COUNTIES	Total Infant Deaths				Infant Deaths in Hospitals			
	Total by Occurrence	Total by Residence	By Occurrence Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence Residence Elsewhere	By Residence; Occurrence Elsewhere
ALBERTA	964	963	15	14	787	786	14	11
Division No. 1	21	23	2	4	19	21	2	4
Division No. 2	38	37	6	5	34	31	6	3
Division No. 3	28	34	2	8	24	30	2	8
Division No. 4	13	11	2	....	11	9	2	....
Division No. 5	18	26	2	10	12	22	....	10
Division No. 6	205	190	19	4	170	155	19	4
Division No. 7	24	32	....	8	22	30	....	8
Division No. 8	55	56	8	9	46	48	7	9
Division No. 9	14	13	3	2	13	12	3	2
Division No. 10	45	47	6	8	38	40	6	8
Division No. 11	300	265	47	12	268	233	46	11
Division No. 12	48	59	....	11	33	43	....	10
Division No. 13	26	30	3	7	21	25	2	6
Division No. 14	21	26	3	8	12	19	1	8
Division No. 15	108	114	4	10	64	68	3	7

TABLE 13: INFANT DEATHS BY OCCURRENCE AND RESIDENCE FOR URBAN PLACES
OF 1,000 POPULATION AND OVER, ALBERTA, 1957

CITY, TOWN OR VILLAGE	Total Infant Deaths				Infant Deaths in Hospitals			
	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere
Athabasca	9	6	4	1	8	4	4	...
Barrhead	2	1	1	...	2	1	1	...
Beverly .....	...	7	...	7	...	7	...	7
Blairmore .....	...	1	...	1	...	1	...	1
Bonnyville	2	...	2	...	2	...	2	...
Bow Island .....	...	1	...	1	...	1	...	1
Bowness	1	7	...	6	...	6	...	6
Brooks	4	1	3	...	4	1	3	...
Calgary	181	146	38	3	156	122	37	3
Camrose	9	5	4	...	8	5	3	...
Cardston	3	2	2	1	3	1	2	...
Claresholm	4	1	3	...	4	1	3	...
Coaldale	1	...	1	...	1	...	1	...
Cold Lake	6	4	2	...	6	4	2	...
Coleman .....	...	2	...	2	...	2	...	2
Devon	1	3	...	2	1	3	...	2
Didsbury	5	...	5	...	5	...	5	...
Drayton Valley	1	8	...	7	...	7	...	7
Drumheller	5	5	2	...	5	5	2	2
Edmonton	279	194	92	7	260	175	91	6
Edson	13	5	9	1	12	4	9	1
Fairview	2	1	2	1	1	...	1	...
Forest Lawn .....	...	1	...	1	...	1	...	1
Fort McLeod .....	...	4	1	...	4	1	...	1
Fort Saskatchewan	3	6	...	3	3	...	3	3
Grande Prairie	16	9	9	2	14	7	9	2
Hanna	5	2	3	...	4	1	3	...
High Prairie	16	3	13	...	12	3	9	...
High River	4	...	4	...	4	...	4	...
Innisfail	6	3	3	...	6	3	3	...
Jasper Place	1	12	...	11	...	11	...	11
Lacombe	5	3	2	...	4	2	2	...
Leduc .....	...	2	...	2	...	2	...	2
Lethbridge	21	16	7	2	20	15	7	2
Lloydminster .....	...	2	...	2	...	2	...	2
Magrath	3	2	1	...	3	2	1	...
McLennan	9	2	7	...	8	2	6	...
McMurray	2	2	2	2	2	2	2	2
Medicine Hat	21	12	11	2	19	10	11	2
Nanton .....	...	3	...	3	...	3	...	3
Olds	6	3	3	...	4	1	3	...
Peace River	9	3	6	...	8	3	5	...
Pincher Creek	10	2	8	...	9	1	8	...
Ponoka	4	4	1	1	4	4	1	1
Raymond	5	3	2	...	4	2	2	...
Redcliff .....	...	1	...	1	...	1	...	1
Red Deer	14	10	4	...	13	9	4	...
Redwater .....	...	...	...	...	...	...	...	...
Rocky Mountain House	9	5	4	...	8	5	3	...
St. Albert .....	...	1	...	1	...	1	...	1
St. Paul	8	3	7	2	8	3	7	2
Stettler	10	7	4	1	9	6	4	1
Stony Plain .....	...	2	...	2	...	2	...	2
Sylvan Lake .....	...	...	...	...	...	...	...	...
Taber	6	4	3	1	5	3	3	1
Three Hills	2	3	...	1	2	3	...	1
Vegreville	4	3	1	...	4	3	1	...
Vermilion	3	2	2	1	3	2	2	1
Vulcan	4	2	3	1	2	2	1	1
Wainwright	3	3	1	1	3	3	1	1
Westlock	5	...	5	...	3	...	3	...
Wetaskiwin	6	3	4	1	6	3	4	1

TABLE 14 — SELECTED CAUSES OF INFANT DEATHS BY SEX AND AGE AT DEATH, ALBERTA—1957 (Continued)

Int. List No.	CAUSE OF DEATH (6th Rev.)	Total Under 1 Year		AGE AT DEATH														Total 28 days to 1 year	28 days and under 2 months	2 months	3 months	4 months	5 months	6 months	7 months	8 months	9 months	10 months	11 months																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		Total	Female	M.	F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.													M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.	M.F.

* Includes Hodgkin's disease, leukaemia and aleukaemia.

TABLE 16 — DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, CANADA, 1957

Int. abbrev. List. No.	CAUSE OF DEATH	Canada		Nfld.	P. E. I.	N. S.	N. B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B. C.	Yukon	N. W. T.
		1956	1957												
B 1	Tuberculosis of respiratory system	1079	1035	64	11	41	28	448	203	61	22	60	77	1	20
B 2	Tuberculosis, other forms	177	148	18	.....	4	4	65	18	9	12	8	9	.....	3
B 3	Syphilis and its sequelae	209	190	6	.....	13	6	61	46	11	12	14	21	.....	.....
B 4	Typhoid fever	9	12	.....	.....	1	.....	8	8	4	.....	2	.....	2	.....
B 6	Dysentery, all forms	29	25	1	.....	.....	1	8	9	.....	3	1	1	.....	.....
B 7	Scarlet fever and streptococcal sore throat	24	25	1	.....	.....	.....	4	4	2	.....	6	1	.....	.....
B 8	Diphtheria	8	20	.....	.....	1	.....	.....	.....	.....	3	1	.....	.....	.....
B 9	Whooping cough	118	63	2	.....	2	1	30	10	2	3	4	11	.....	.....
B10	Meningococcal infections	84	86	4	.....	4	6	29	21	4	4	4	9	.....	1
B12	Acute poliomyelitis	51	26	.....	.....	1	.....	6	8	4	4	6	1	.....	14
B14	Measles	171	108	3	.....	3	.....	22	19	10	12	16	9	.....	.....
B15	Typhus and other rickettsial diseases	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B16	Malaria	386	348	7	4	16	12	110	99	22	12	27	37	.....	2
B17	All other diseases classified as infective and parasitic	20 868	21 390	449	150	946	654	5 831	7 675	1 080	1 092	1 262	2 229	9	13
B18	All malignant neoplasms*	215	234	4	.....	9	4	64	80	10	15	21	26	.....	1
B19	Leukaemia of leukaemia	835	890	15	.....	8	45	221	309	43	59	71	93	.....	.....
B20	Benign and unspecified neoplasms	356	349	12	3	17	11	102	111	20	21	20	31	.....	1
B21	Diabetes mellitus	1820	1866	23	6	81	60	591	608	95	100	141	160	1	.....
B22	Anaemias	355	328	4	6	10	10	110	104	15	31	19	19	.....	3
B23	Vascular lesions affecting central nervous system	14 447	15 151	411	121	814	506	2 927	6 222	889	791	939	1 522	6	.....
B24	Nonmeningococcal meningitis	242	205	11	2	7	12	75	57	9	10	14	7	.....	1
B25	Rheumatic fever	110	116	3	1	4	2	68	23	3	3	5	3	.....	1
B26	Chronic rheumatic heart disease	1448	1609	25	4	61	42	438	583	83	90	97	164	.....	1
B27	Arteriosclerotic and degenerative heart disease	36 576	38 278	442	275	1 654	1 283	8 205	16 136	2 142	1 791	1 987	4 335	13	15
B28	Other diseases of heart	1913	1969	102	10	109	86	559	542	134	136	128	160	.....	2
B29	Hypertension with heart disease	4038	3781	69	26	193	130	1 424	1 154	150	174	159	302	.....	.....
B30	Hypertension without mention of heart	959	914	38	17	32	32	385	187	40	69	54	69	.....	17
B31	Influenza	612	1762	75	18	87	74	583	466	93	87	135	352	.....	43
B32	Pneumonia	5158	5398	166	32	219	209	1 131	1 354	39	291	382	638	.....	.....
B33	Bronchitis	722	772	23	5	30	15	700	375	62	77	78	107	2	.....
B34	Ulcer of stomach and duodenum	779	797	6	3	4	15	15	315	42	35	51	12	.....	1
B35	Appendicitis	189	184	1	8	28	21	66	50	8	15	15	12	.....	1
B36	Intestinal obstruction and hernia	837	863	1	1	29	22	282	282	40	40	28	76	.....	3
B37	Gastritis, duodenitis, enteritis and colitis except diarrhoea of newborn	839	863	25	6	30	28	314	230	61	34	62	73	.....	.....
B38	Cirrhosis of liver	839	969	14	4	18	19	318	381	41	26	43	105	.....	3
B39	Nephritis and nephrosis	2143	2020	38	16	71	77	1 076	455	53	65	60	107	.....	1

TABLE 16 — DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, CANADA, 1957 (Cont'd)

Int. abbrev. List. No.	CAUSE OF DEATH	Canada		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.
		1956	1957												
B39	Hyperplasia of prostate	632	517	19	6	33	18	131	175	25	21	23	66	...	...
B40	Complications of pregnancy, childbirth and the puerperium	278	255	20	2	13	5	115	55	10	5	12	15	1	3
B41	Congenital malformations	2838	2779	87	17	103	96	1,011	853	117	120	189	176	5	5
B42	Birth injuries, postnatal asphyxia and atelectasis	3192	3232	84	12	90	107	1,131	1,019	173	140	240	231	3	2
B43	Infections of the newborn	713	798	30	1	37	33	391	139	41	19	40	56	1	10
B44	Other diseases peculiar to early infancy and immaturity unqualified	3649	3951	154	22	131	156	1,472	1,101	145	181	261	305	5	18
B45	Senility without mention of psychosis, ill-defined and unknown causes	1813	1700	309	9	73	97	424	172	80	60	308	84	2	82
B46	All other diseases	10,489	10,685	218	82	488	327	2,939	3,532	671	637	670	1,095	4	22
BE47	Motor vehicle accidents	3559	3694	38	16	142	158	1,181	1,304	163	157	247	285	3	...
	Traffic accidents	3491	3579	34	15	138	151	1,168	1,260	154	147	230	279	3	...
	Nontraffic accidents	68	115	4	1	4	7	13	44	9	10	17	6	...	...
BE48	All other accidents	5712	5961	160	24	260	219	1,521	2,030	301	291	382	721	14	38
BE49	Suicide and self-inflicted injury	1228	1247	14	6	50	18	257	490	69	75	105	163	...	...
BE50	Homicide and operations of war	188	183	3	...	6	6	37	79	9	5	11	25	2	...
	All causes	131,961	136,579	3,198	916	5,977	4,595	36,234	49,164	7,398	6,743	8,255	13,711	93	325

* Includes Hodgkin's disease, leukaemia and aleukaemia.

TABLE 17 — DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1957

Int. abbrev. List. No.	CAUSE OF DEATH	Canada		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.
		1956													
		1956	1957												
B 1	Tuberculosis of respiratory system	6.7	6.2	15.0	11.1	5.8	5.0	9.4	3.6	7.1	2.5	5.2	5.2	8.3	106.3
B 2	Tuberculosis, other forms	1.1	0.9	4.2	...	0.6	0.7	1.4	0.3	1.0	1.0	0.7	0.6	...	15.8
B 3	Syphilis and its sequelae	1.3	1.1	1.4	...	1.9	1.1	1.3	0.8	1.3	1.4	1.2	1.4	...	...
B 4	Typhoid fever	0.1	0.1	...	...	0.1	0.2	0.1	0.1	0.5	...	0.2	...	16.7	...
B 6	Dysentery, all forms	0.2	0.2	0.2	...	0.1	0.2	0.2	0.2	...	0.3	0.1	0.1	...	...
B 7	Scarlet fever and streptococcal sore throat	0.1	0.1	0.5	...	0.1	0.1	0.1	0.1	0.2	...	0.5	0.1	...	...
B 8	Diphtheria	†	0.2	0.1	...	0.3	0.2	0.6	0.2	0.2	0.3	0.3	0.7	...	...
B 9	Whooping cough	0.7	0.4	...	...	0.6	1.1	0.6	0.4	0.5	0.5	0.3	0.6	...	5.3
B10	Meningococcal infections	0.5	0.5	0.9	...	0.1	0.1	0.1	0.1	0.1	1.4	0.5	0.1	...	...
B12	Acute poliomyelitis	0.3	0.2	...	...	0.1	0.1	0.1	0.1	0.1	1.4	1.4	0.6	...	73.7
B14	Measles	1.1	0.7	0.7	...	0.4	0.5	0.3	1.2	1.4	1.4	1.4	0.6	...	...
B16	Malaria	2.4	†	1.6	4.0	2.3	2.1	2.3	1.8	2.6	1.4	2.3	2.5	...	10.5
B17	All other diseases classified as infective and parasitic	129.8	128.9	106.4	151.5	134.8	115.8	122.6	136.5	125.6	124.2	108.8	149.9	75.0	68.4
B18	All malignant neoplasms*	1.3	1.4	0.9	...	1.3	0.7	1.3	1.4	1.2	1.7	1.8	1.7	...	5.3
B19	Hodgkin's disease	5.2	5.4	3.5	8.1	6.4	4.6	4.6	5.5	5.0	6.7	6.1	6.3	...	...
B20	Leukaemia and aleukaemia	2.2	2.1	2.8	3.0	2.4	1.9	2.1	2.0	2.3	2.4	1.7	2.1	...	5.3
B21	Benign and unspecified neoplasms	11.3	11.2	5.4	6.1	11.5	10.6	12.4	10.8	11.0	11.4	12.2	10.8	8.3	...
B22	Diabetes mellitus	2.2	2.0	0.9	6.1	1.4	1.8	2.3	1.8	1.7	3.5	1.6	1.3	...	...
B23	Vascular lesions affecting central nervous system	89.8	91.3	96.5	122.2	116.0	89.6	61.5	110.7	103.4	90.0	80.9	102.4	50.0	15.8
B24	Nonmeningococcal meningitis	1.5	1.2	2.6	2.0	1.0	2.1	1.6	1.0	1.0	1.1	1.2	0.5	...	5.3
B25	Rheumatic fever	0.7	0.7	0.7	1.0	0.6	0.4	1.4	0.4	0.4	0.3	0.4	0.2	...	5.3
B26	Chronic rheumatic heart disease	9.0	9.7	5.9	4.0	8.7	7.4	9.6	10.4	9.7	10.2	8.4	11.0	8.3	...
B27	Arteriosclerotic and degenerative heart disease	227.4	230.7	103.8	277.8	235.6	227.1	172.4	287.0	249.1	273.8	171.3	291.5	108.3	78.9
B28	Other diseases of heart	11.9	11.9	23.9	10.1	15.5	15.2	11.7	9.6	15.6	15.5	11.0	10.8	8.3	10.5
B29	Hypertension with heart disease	25.1	22.8	16.2	26.3	27.5	23.0	29.9	20.5	17.4	19.8	13.7	20.3	...	...
B30	Hypertension without mention of heart	6.0	5.5	8.9	8.1	4.6	5.7	8.1	3.3	4.7	7.8	4.7	4.6	...	...
B31	Influenza	3.8	10.6	17.6	17.2	12.4	13.1	12.5	8.3	10.8	9.9	11.6	7.7	33.3	89.5
B32	Pneumonia	32.1	32.5	39.0	32.3	31.2	37.0	23.8	34.3	44.1	33.4	30.3	42.9	66.7	226.3
B33	Bronchitis	4.5	4.7	5.4	5.1	4.3	3.2	4.2	4.5	7.2	5.3	4.1	5.2	16.7	5.3
B34	Ulcer of stomach and duodenum	4.8	4.8	1.4	3.0	6.7	2.7	3.7	5.6	4.9	4.0	4.4	7.2	...	5.3
B35	Appendicitis	1.2	1.1	2.1	1.0	0.7	1.4	1.3	0.9	0.9	1.7	1.3	0.8	...	5.3
B36	Intestinal obstruction and hernia	5.2	4.6	2.6	8.1	4.1	3.7	4.7	5.0	4.7	4.6	2.4	5.1	8.3	10.5
B37	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	5.7	5.2	5.9	6.1	4.3	5.0	6.6	4.1	7.1	3.9	5.3	4.9	25.0	15.8
B38	Cirrhosis of liver	5.2	5.8	3.3	4.0	2.6	3.4	6.7	6.8	4.8	3.0	3.7	7.1	...	...
B39	Nephritis and nephrosis	13.3	12.2	8.9	16.2	10.1	13.6	22.6	8.1	6.2	7.4	5.2	7.2	8.3	5.3

TABLE 17.—DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1957 (Continued)

Int. abbrev. List. No.	CAUSE OF DEATH	Canada		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.
		1956	1957												
B39	Hyperplasia of prostate	3.9	3.1	4.5	6.1	4.7	3.2	2.8	3.1	2.9	2.4	2.0	4.4	...	...
B40	Complications of pregnancy, childbirth and the puerperium	1.7	1.5	2.1	2.0	1.7	0.9	2.7	1.0	1.2	1.0	1.0	1.9	8.3	10.5
B41	Congenital malformations	17.6	16.5	26.1	12.2	14.7	17.0	27.3	15.2	13.9	13.7	16.3	1.9	4.7	26.3
B42	Birth injuries, postnatal asphyxia and atelectasis	18.6	12.5	19.7	10.2	12.8	13.9	23.8	18.1	20.1	15.9	20.7	15.5	25.0	10.5
B43	Sections of the newborn	24.7	24.8	7.0	1.0	15.3	5.8	8.2†	2.5	4.8	2.2	3.4	3.8	8.3	52.6
B44	Obstetric injuries to early infancy and immaturity unqualified	21.7	23.8	36.2	22.2	18.7	27.6	30.9	19.6	16.9	20.6	22.5	20.5	41.7	94.7
B45	Serility without mention of psychosis, ill-defined and unknown causes	11.3	10.2	72.5	9.1	10.4	17.2	8.9	3.1	9.3	6.8	26.6	5.6	16.7	431.6
B46	All other diseases	65.2	64.4	51.2	82.8	69.5	57.9	61.8	62.8	78.0	72.5	57.8	73.6	33.3	115.8
BE47	Motor vehicle accidents	21.7	21.6	8.0	15.2	19.7	26.7	24.5	22.4	17.9	16.7	19.8	18.8	25.0	...
	Traffic accidents	0.4	0.7	0.9	1.0	0.6	1.2	0.3	0.8	1.0	1.1	1.5	0.4	...	...
	Nontraffic accidents .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
BE48	All other accidents	35.5	35.9	37.6	24.2	37.0	38.8	32.0	36.1	35.0	33.1	32.9	48.5	116.7	200.0
BE49	Suicide and self-inflicted injury	7.6	7.5	3.3	6.1	7.1	3.2	5.4	8.7	8.0	8.5	9.1	11.0	16.7	...
BE50	Homicide and operations of war	1.2	1.1	0.7	...	0.9	1.1	0.8	1.4	1.0	0.6	0.9	1.7	...	...
	All causes	820.6	823.3	750.7	925.3	851.4	813.3	761.5	874.5	856.7	767.1	711.6	922.1	775.0	1,710.5

* Includes Hodgkin's disease, leukaemia and aleukaemia.

† Less than 0.1 per 100,000 population.

TABLE 18 — CERTAIN CAUSES OF DEATH, BY NUMBERS AND RATES FOR EACH YEAR OF THE LAST DECENNIAL PERIOD

CAUSE OF DEATH	1957		1956		1955		1954		1953		1952		1951		1950		1949		1948		
	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	
Diseases of the Heart	2371	204	2298	204	2420	227	2345	225	2274	227	2247	231	2113	224	2046	228	2033	233	1896	224	
Cancer	1262	108	1251	110	1234	116	1164	112	1129	112	1072	110	1065	113	997	110	957	109	975	115	
Diseases of the Arteries	254	21	173	15	173	16	155	14	148	14	136	14	129	13	133	14	128	14	28	3	
Violent Deaths (Suicides excepted)	640	55	667	59	672	63	623	59	667	66	589	60	568	60	573	64	596	68	563	70	
Pneumonia (all forms)	352	30	325	28	326	30	253	24	324	32	298	30	341	36	275	30	376	43	362	42	
Pulmonary Tuberculosis	60	5	36	3	64	6	45	4	51	5	91	9	119	12	137	15	155	17	200	23	
Influenza	135	11	35	3	44	4	14	1	33	3	47	4	114	12	26	2	41	4	36	4	
Nephritis	60	5	77	6	62	6	79	7	108	10	74	7	88	9	90	10	217	24	219	25	
Appendicitis	15	1	8	9	9	12	1	15	1	15	1	15	1	18	1	22	2	23	2	34	4
Suicides	105	8	115	10	96	9	83	8	72	7	94	9	86	9	82	9	80	9	84	9	
Cerebral Haemorrhage	939	80	806	71	856	80	842	81	851	84	727	74	756	80	693	77	666	76	568	67	
Diabetes Mellitus	141	12	98	8	123	11	112	10	99	9	104	10	89	9	91	10	156	17	134	15	
Diarrhoea and Enteritis	59	5	64	5	54	5	69	6	47	4	77	7	60	7	69	7	63	7	93	10	
Puerperal Causes	12	1	14	1	15	1	11	1	21	2	15	1	15	1	19	2	25	2	29	3	
Whooping Cough	4	...	3	...	...	...	7	...	12	1	8	...	7	...	3	...	5	...	11	1
Scarlet Fever	1	...	...	...	1	...	...	...	5	...	2	...	6	...	11	1	...	...	...	...
Diphtheria	6	...	...	...	1	...	2	...	3	...	1	...	1	...	1	...	12	1	10	1
Typhoid and Paratyphoid	3	...	2	...	2	...	...	...	1	...	2	...	1	...	1	...	...	...	...	...
Measles	16	1	2	...	24	2	6	...	1	...	2	...	12	...	8	...	19	...	7	...	
Polio	8	...	9	...	8	...	28	2	108	10	79	8	2	...	8	...	9	1	28	3	

[illegible]

IX. DISEASES OF THE DIGESTIVE SYSTEM		Total	Male	Female	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
A104	Gastro-enteritis and colitis, except diarrhoea of the newborn	5	3	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

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	Male	Total	Female
XII. XIII. DISEASES OF THE SKIN AND MUSCULO-SKELETAL SYSTEM	3	3	Female
A122 Arthritis and spondylitis	3		Male
			Female
XIV. CONGENITAL MALFORMATIONS	6	4	Total
	2	2	Male
	4	2	Female
A127 Spina bifida and meningocele	1	1	Male
A128 Congenital malformations of circulatory system	1	1	Male
A129 All other congenital malformations	1	1	Female
	2	1	Male
			Female
XV. CERTAIN DISEASES OF EARLY INFANCY	21	21	Total
	9	9	Male
	12	12	Female
A131 Perinatal asphyxia and atelectasis	2	2	Male
A132 Infections of the newborn	2	2	Female
A134 All other defined diseases of early infancy	1	1	Male
A135 Ill-defined diseases peculiar to early infancy, and immaturity unqualified	2	2	Female
	6	6	Male
			Female
XVI. SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS	10	3	Total
	4	1	Male
	6	2	Female
A136 Senility without mention of psychosis	1		Male
A137 Ill-defined and unknown causes	3	1	Female
	6	2	Male
			Female
EXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO EXTERNAL CAUSE)	7	1	Total
	5	1	Male
	2	1	Female
AE133 Motor vehicle accidents	1		Male
A Traffic accidents	1		Female
(810-825)			Male
AE140 Accidental poisoning	1		Female

TABLE 21 — SELECTED CAUSES OF INFANT DEATHS OF INDIANS, BY SEX AND AGE AT DEATH, ALBERTA, 1957

[illegible]

TABLE 23A—LIVE BIRTHS OF INDIANS, ALBERTA, BY MONTHS, 1957
(ALL INDIANS)

	MONTHS												
	Total	January	February	March	April	May	June	July	August	September	October	November	December
Province of Alberta	1636	159	150	144	144	135	133	141	134	134	135	109	118

TABLE 23B—LIVE BIRTHS OF INDIANS, ALBERTA, BY MONTHS, 1957
("TREATY INDIANS")

	MONTHS												
	Total	January	February	March	April	May	June	July	August	September	October	November	December
Province of Alberta	894	87	96	85	88	75	70	73	69	71	71	50	59

TABLE 24—LEGITIMATE AND ILLEGITIMATE BIRTHS OF INDIANS (EXCLUSIVE OF
STILLBIRTHS) IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHER, 1957
(ALL INDIANS)

	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	1636	848	788	1117	583	534	519	265	254

TABLE 25—LEGITIMATE AND ILLEGITIMATE BIRTHS OF INDIANS (EXCLUSIVE OF
STILLBIRTHS) IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHER, 1957
("TREATY INDIANS")

	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	894	464	430	612	316	296	282	148	134

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TABLE 26A—LIVE BIRTHS OF INDIANS BY AGE OF PARENTS, ALBERTA, 1957

AGE OF MOTHER (years)	AGE OF FATHER											Total born to married mothers	Born to un- married mothers	Born to all mothers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over	Not stated		
14 years	...	1	...	...	...	...	...	...	...	...	...	...	1	2
15 years	2	...	...	...	...	...	...	...	...	...	2	3
16 years	1	10	1	...	...	...	...	...	...	...	...	...	12	6
17 years	...	17	8	2	...	...	...	...	...	...	...	...	29	23
18 years	3	30	10	3	1	...	...	...	...	...	...	...	49	35
19 years	1	32	16	5	1	2	1	...	...	...	...	...	63	64
20 years	1	32	22	7	1	...	...	...	...	...	...	...	58	91
21 years	...	10	21	6	1	...	...	...	...	...	...	...	43	103
22 years	1	25	34	7	4	3	1	...	...	...	...	...	38	65
23 years	...	13	28	15	7	1	1	1	...	...	...	1	75	113
24 years	...	8	33	15	2	2	1	...	...	...	...	...	67	107
25 years	...	3	29	18	4	1	3	...	...	...	...	...	61	84
26 years	...	5	25	19	3	1	1	...	...	...	...	...	58	75
27 years	...	1	13	18	9	...	2	1	...	...	...	...	54	77
28 years	...	4	17	17	6	3	3	...	...	...	...	...	44	61
29 years	...	2	5	17	11	1	1	3	...	1	...	1	51	78
30 years	1	1	2	19	10	3	...	1	2	...	...	...	42	59
31 years	3	13	17	6	...	...	...	...	...	...	39	48
32 years	...	1	3	12	15	9	2	3	1	...	1	1	40	54
33 years	...	1	1	13	13	5	6	1	...	...	...	...	48	58
34 years	2	4	13	11	7	1	...	...	...	...	40	47
35 years	2	10	11	5	2	2	...	...	...	38	48
36 years	2	7	10	11	2	4	...	...	...	...	32	39
37 years	9	7	6	1	3	...	...	...	25	35
38 years	7	9	6	...	...	2	...	...	28	34
39 years	5	12	9	3	1	...	...	...	26	28
40 years	3	8	6	3	...	1	...	...	21	32
41 years	1	...	5	5	3	...	...	...	...	14	24
42 years	1	...	...	3	5	3	...	...	...	...	14	18
43 years	3	6	...	...	2	...	...	13	14
44 years	1	3	...	1	...	...	...	...	11	13
45 years	4	3	1	...	...	...	8	10
46 years	1	...	...	...	...	...	...
47 years	1	...	...	...	...	1	2
48 years	1	...	...	...	...	...	...	1	1
49 years
50 and over
Not stated	1	...	...	...	...	...	...	...	...	1	2
Total Fathers	8	196	276	215	160	117	83	35	12	2	5	8	1117	1636

TABLE 26B—LIVE BIRTHS OF TREATY INDIANS BY AGE OF PARENTS, ALBERTA, 1957

AGE OF MOTHER (years)	AGE OF FATHER											Total born to married mothers	Born to un- married mothers	Born to all mothers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over	Not stated		
15 years	5	5
16 years	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	13
17 years	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	36
18 years	2	15	5	1	.....	.....	.....	.....	.....	.....	.....	1	22	46
19 years	1	20	8	1	1	1	.....	.....	.....	.....	.....	.....	32	57
20 years	1	17	18	3	.....	.....	.....	.....	.....	.....	.....	.....	29	58
21 years	7	10	2	.....	.....	.....	.....	.....	.....	.....	.....	19	35
22 years	1	14	22	5	2	2	.....	.....	.....	.....	.....	.....	46	65
23 years	10	19	8	1	1	.....	.....	.....	.....	.....	.....	39	59
24 years	3	18	10	2	1	.....	.....	.....	.....	.....	.....	34	47
25 years	1	16	8	.....	1	1	.....	.....	.....	.....	.....	27	38
26 years	3	11	14	.....	1	1	.....	.....	.....	.....	.....	30	42
27 years	5	14	6	.....	2	1	.....	.....	.....	.....	28	36
28 years	1	11	7	2	1	2	.....	.....	.....	.....	.....	24	40
29 years	1	3	12	6	.....	.....	2	.....	.....	.....	.....	24	32
30 years	1	1	13	6	.....	.....	.....	2	.....	.....	.....	23	27
31 years	2	8	10	4	.....	.....	.....	.....	.....	.....	24	32
32 years	1	2	10	10	3	2	3	1	.....	1	.....	33	41
33 years	1	6	9	3	4	1	.....	.....	.....	.....	24	27
34 years	1	1	8	6	2	.....	.....	.....	.....	.....	18	23
35 years	1	6	5	1	2	1	.....	.....	.....	16	17
36 years	1	3	6	2	2	.....	.....	.....	.....	14	19
37 years	5	3	3	1	1	.....	1	.....	14	17
38 years	4	1	2	1	1	.....	.....	.....	9	10
39 years	4	7	4	.....	.....	.....	.....	.....	15	18
40 years	2	.....	1	2	.....	.....	.....	.....	12	14
41 years	1	.....	.....	3	4	2	.....	.....	.....	.....	10	11
42 years	3	3	2	.....	.....	1	.....	9	9
43 years	1	2	5	.....	1	.....	.....	.....	9	11
44 years	1	2	.....	.....	.....	.....	3	4
45 years
46 years	1	.....	.....	.....	.....	1	2
47 years	1	.....	.....	.....	.....	1	1
48 years	1	.....	.....	.....	.....	.....	.....	1	1
49 years
50 and over
Not stated	1	1
Total Fathers	5	109	147	127	88	62	40	23	7	.....	3	1	612	894

TABLE 28: LIVE BIRTHS AND LIVE BIRTHS IN HOSPITAL BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS, ALBERTA, 1957

CENSUS DIVISIONS	TOTAL BIRTHS				BIRTHS IN HOSPITALS			
	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere
ALBERTA	35,623	35,718	314	409	34,740	34,838	308	406
Division No. 1	870	966	43	139	855	951	43	139
Division No. 2	2,279	2,072	258	51	2,224	2,018	255	49
Division No. 3	882	978	53	149	828	923	53	148
Division No. 4	427	428	53	54	408	409	53	54
Division No. 5	754	973	63	282	728	951	58	281
Division No. 6	8,129	7,865	450	186	8,101	7,836	447	182
Division No. 7	1,074	1,126	73	125	1,062	1,114	73	125
Division No. 8	2,092	1,978	215	101	2,064	1,942	213	101
Division No. 9	488	431	110	53	471	414	109	52
Division No. 10	1,469	1,716	146	393	1,451	1,698	145	392
Division No. 11	11,944	11,436	846	338	11,907	11,396	845	334
Division No. 12	1,539	1,581	97	139	1,256	1,302	93	139
Division No. 13	914	1,070	119	275	876	1,035	116	275
Division No. 14	344	593	18	267	327	574	15	262
Division No. 15	2,418	2,505	40	127	2,192	2,275	39	122

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TABLE 29: LIVE BIRTHS BY OCCURRENCE AND RESIDENCE FOR URBAN PLACES
OF 1,000 POPULATION AND OVER, ALBERTA, 1957

CITY, TOWN OR VILLAGE	Total Live Births				Live Births in Hospitals			
	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere
Athabasca	196	50	151	5	195	50	150	5
Barrhead	192	47	157	12	191	47	156	12
Beverly .....	.....	217	.....	217	.....	217	.....	217
Blairmore	1	39	1	39	1	39	1	39
Bonnyville	204	67	146	9	203	67	145	9
Bow Island .....	.....	21	.....	21	.....	21	.....	21
Bowness .....	.....	268	.....	268	.....	268	.....	268
Brooks	243	82	162	1	241	81	161	1
Calgary	7,456	6,212	1,362	118	7,452	6,208	1,362	118
Camrose	444	172	286	14	444	172	286	14
Cardston	196	85	120	9	196	85	120	9
Claresholm	197	88	115	6	197	88	115	6
Coaldale	94	81	33	20	94	81	33	20
Cold Lake	128	62	82	16	126	54	80	8
Coleman .....	.....	55	.....	55	.....	54	.....	54
Devon	26	51	4	29	26	51	4	29
Didsbury	135	31	112	8	133	31	110	8
Drayton Valley	6	218	1	213	2	213	.....	211
Drumheller	287	100	197	10	286	100	196	10
Edmonton	11,522	8,364	3,263	105	11,517	8,360	3,261	104
Edson	289	163	160	34	288	163	159	34
Fairview	161	44	119	2	160	44	118	2
Forest Lawn .....	.....	102	.....	102	.....	102	.....	102
Fort McLeod	101	74	38	11	100	73	38	11
Fort Saskatchewan .....	.....	101	.....	101	.....	101	.....	101
Grande Prairie	530	306	244	20	529	306	243	20
Hanna	186	88	100	2	184	88	98	2
High Prairie	364	78	296	10	361	76	294	9
High River	243	49	196	2	243	49	196	2
Innisfail	173	61	118	6	173	61	118	6
Jasper Place	1	692	.....	691	.....	690	.....	690
Lacombe	276	97	187	8	274	96	186	8
Leduc .....	.....	69	.....	69	.....	69	.....	69
Lethbridge	1,369	857	528	16	1,368	857	527	16
Lloydminster .....	.....	118	.....	118	.....	118	.....	118
Magrath	61	28	35	2	60	28	34	2
McLennan	243	58	187	2	243	58	187	2
McMurray	46	24	29	7	44	24	27	7
Medicine Hat	856	575	296	15	854	573	296	15
Nanton .....	.....	37	.....	37	.....	37	.....	37
Olds	214	84	140	10	213	84	139	10
Peace River	220	114	113	7	219	113	113	7
Pincher Creek	172	88	93	9	172	88	93	9
Ponoka	205	107	105	7	205	107	105	7
Raymond	91	46	50	5	89	46	48	5
Redcliff .....	.....	43	.....	43	.....	43	.....	43
Red Deer	761	554	237	30	761	553	237	29
Redwater .....	.....	59	.....	59	.....	59	.....	59
Rocky Mountain House	166	93	81	8	159	89	78	8
St. Albert .....	.....	56	.....	56	.....	56	.....	56
St. Paul	263	107	173	17	263	107	173	17
Stettler	286	152	153	19	285	151	153	19
Stony Plain	1	47	.....	46	.....	45	.....	45
Sylvan Lake .....	.....	35	.....	35	.....	35	.....	35
Taber	366	110	264	8	366	110	264	8
Three Hills	115	56	63	4	115	56	63	4
Vegreville	183	68	122	7	182	67	122	7
Vermilion	172	72	110	10	171	72	109	10
Vulcan	140	39	106	5	138	39	104	5
Wainwright	233	126	113	6	233	126	113	6
Westlock	267	47	230	10	267	47	230	10
Wetaskiwin	355	141	225	11	355	141	225	11

TABLE 30: LIVE BIRTHS BY MONTH, 1957, ALBERTA

	Total	January	February	March	April	May	June	July	August	September	October	November	December
Province of Alberta	35,718	2,752	2,653	3,047	3,031	3,182	3,033	3,188	3,026	3,067	3,063	2,798	2,858

TABLE 31: LIVE BIRTHS FOR CENSUS DIVISIONS BY TYPE OF ATTENDANCE.
ALBERTA, 1957

CENSUS DIVISIONS	Total	Attended by			
		Physician	Nurse	Midwife	Unattended and Not Stated
ALBERTA	35,718	35,082	211	213	212
Division No. 1	966	951	.....	12	3
Division No. 2	2,072	2,028	9	28	7
Division No. 3	978	922	28	25	3
Division No. 4	428	417	.....	7	4
Division No. 5	973	909	50	2	12
Division No. 6	7,865	7,846	1	9	9
Division No. 7	1,126	1,118	.....	2	6
Division No. 8	1,978	1,955	4	13	6
Division No. 9	431	403	18	2	8
Division No. 10	1,716	1,704	5	4	3
Division No. 11	11,436	11,415	6	5	10
Division No. 12	1,581	1,496	37	19	29
Division No. 13	1,070	1,041	6	7	16
Division No. 14	593	586	.....	5	2
Division No. 15	2,505	2,291	47	73	94

BUREAU OF VITAL STATISTICS

TABLE 32: LIVE BIRTHS IN INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER BY TYPE OF ATTENDANCE, ALBERTA, 1957

CITY, TOWN OR VILLAGE	Total	Attended by			
		Physician	Nurse	Midwife	Unattended and Not Stated
Athabasca	50	50	.....	.....	.....
Barrhead	47	47	.....	.....	.....
Beverly	217	217	.....	.....	.....
Blairmore	39	39	.....	.....	.....
Bonnyville	67	66	1	.....	.....
Bow Island	21	21	.....	.....	.....
Bowness	268	268	.....	.....	.....
Brooks	82	82	.....	.....	.....
Calgary	6,212	6,208	.....	.....	4
Camrose	172	172	.....	.....	.....
Cardston	85	85	.....	.....	.....
Claresholm	88	88	.....	.....	.....
Coaldale	81	81	.....	.....	.....
Cold Lake	62	62	.....	.....	.....
Coleman	55	55	.....	.....	.....
Devon	51	51	.....	.....	.....
Didsbury	31	31	.....	.....	.....
Drayton Valley	218	217	.....	.....	1
Drumheller	100	100	.....	.....	.....
Edmonton	8,364	8,363	1	.....	.....
Edson	163	163	.....	.....	.....
Fairview	44	44	.....	.....	.....
Forest Lawn	102	102	.....	.....	.....
Fort McLeod	74	73	.....	.....	1
Fort Saskatchewan	101	101	.....	.....	.....
Grande Prairie	306	306	.....	.....	.....
Hanna	88	88	.....	.....	.....
High Prairie	78	77	.....	.....	1
High River	49	49	.....	.....	.....
Innisfail	61	61	.....	.....	.....
Jasper Place	682	680	1	.....	1
Lacombe	97	97	.....	.....	.....
Leduc	69	69	.....	.....	.....
Lethbridge	857	857	.....	.....	.....
Lloydminster	118	118	.....	.....	.....
Magrath	28	28	.....	.....	.....
McLennan	58	58	.....	.....	.....
McMurray	24	24	.....	.....	.....
Medicine Hat	575	573	.....	1	1
Nanton	37	37	.....	.....	.....
Olds	84	84	.....	.....	.....
Peace River	114	114	.....	.....	.....
Pincher Creek	88	88	.....	.....	.....
Ponoka	107	107	.....	.....	.....
Raymond	46	46	.....	.....	.....
Redcliff	43	43	.....	.....	.....
Red Deer	554	554	.....	.....	.....
Redwater	59	59	.....	.....	.....
Rocky Mountain House	93	93	.....	.....	.....
St. Albert	56	56	.....	.....	.....
St. Paul	107	107	.....	.....	.....
Stettler	152	151	.....	.....	1
Stony Plain	47	46	.....	.....	1
Sylvan Lake	35	35	.....	.....	.....
Taber	110	110	.....	.....	.....
Three Hills	56	56	.....	.....	.....
Vegreville	68	68	.....	.....	.....
Vermilion	72	72	.....	.....	.....
Vulcan	39	39	.....	.....	.....
Wainwright	126	126	.....	.....	.....
Westlock	47	47	.....	.....	.....
Wetaskiwin	141	141	.....	.....	.....

TABLE 33: LIVE BIRTHS BY AGES OF PARENTS, ALBERTA, 1957

Age of Mother (years)	AGE OF FATHER											Total born to married mothers	Born to un- married mothers	Born to all mothers	
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over				
13 years	2	1	1
14 years	16	10	12
15 years	133	22	38
16 years	426	92	225
17 years	823	146	572
18 years	1,340	167	990
19 years	1,695	192	1,532
20 years	1,960	146	1,867
21 years	2,223	125	2,348
22 years	2,329	114	2,443
23 years	2,326	87	2,413
24 years	2,305	67	2,372
25 years	2,110	59	2,169
26 years	1,952	49	2,001
27 years	1,831	54	1,885
28 years	1,645	40	1,685
29 years	1,508	29	1,537
30 years	1,404	36	1,440
31 years	1,249	27	1,276
32 years	1,136	33	1,169
33 years	1,022	27	1,049
34 years	968	20	988
35 years	810	24	834
36 years	699	16	715
37 years	547	8	555
38 years	455	11	466
39 years	299	6	305
40 years	214	13	227
41 years	194	4	198
42 years	144	3	147
43 years	73	3	76
44 years	34	.....	34
45 years	9	1	10
46 years	10	1	11
47 years	4	.....	4
48 years	1	.....	1
49 years
50 and over
Not stated	7	12	17
Total Fathers	265	5,787	10,841	8,032	4,930	2,418	1,092	374	107	20	20	22	33,908	1,810	35,718

BUREAU OF VITAL STATISTICS

TABLE 34 — LIVE BIRTHS BY AGE OF MOTHER AND BIRTH ORDER, ALBERTA, 1957

Age of Mother	ORDER OF BIRTH OF CHILD															Total	Not stated											
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th	27th	
13 years	1																											
14 years	12																											
15 years	38																											
16 years	225	212	13																									
17 years	572	503	65	4																								
18 years	990	754	218	17	1																							
19 years	1,532	1,070	374	77	10	1																						
20 years	1,867	1,044	605	187	30	6																						
21 years	2,106	1,005	733	279	78	1		1																				
22 years	2,348	1,925	878	373	140	189																						
23 years	2,443	812	902	468	60	11	1	1																				
24 years	2,413	645	856	557	78	30	9	2																				
25 years	2,872	524	790	599	113	45	14	2																				
26 years	2,469	410	650	578	135	66	22	2																				
27 years	2,001	351	530	557	139	82	25	7																				
28 years	1,885	288	464	301	175	88	46	23	5																			
29 years	1,685	217	383	411	166	96	48	24	11	1																		
30 years	1,537	198	305	413	160	78	54	23	8	4	2																	
31 years	1,557	146	272	351	182	89	53	37	11	9	2																	
32 years	1,776	171	324	249	161	97	52	34	23	9	4	2																
33 years	1,689	109	242	228	157	97	53	37	19	17	2	1																
34 years	1,049	174	147	232	122	106	59	39	20	13	4	2																
35 years	988	68	135	220	191	85	68	48	25	17	5	4																
36 years	834	53	97	143	122	85	68	48	25	17	5	4																
37 years	715	45	71	128	142	83	69	41	21	11	9	8																
38 years	555	29	60	74	116	101	63	41	17	19	11	7	6															
39 years	466	18	48	70	66	63	31	20	14	9	10	3	8	1														
40 years	305	12	27	40	51	35	24	17	19	6	5	5	8	1														
41 years	227	9	16	31	33	25	22	13	14	6	11	5	7	7														
42 years	198	4	19	25	27	26	20	13	10	5	6	12	4	3														
43 years	147	5	7	15	27	13	11	5	9	8	5	12	4	3														
44 years	76	3	4	7	6	9	7	2	7	2	2	2	2	2														
45 years	34	1	6	3	5	3	3	4	2	3	1	1	1	1														
46 years	10	1	1	1	1	2	1	2	1	1	1	2	1	1														
47 years	11	1	1	1	1	1	2	1	1	1	1	1	1	1														
48 years	4																											
49 years	1																											
50 and over	1																											
Not stated	17	2	3		1																							
Total	35,719	9,693	9,087	6,927	4,294	2,350	1,366	796	436	268	185	108	78	61	27	16	14	5	3	1								13

TABLE 35: MULTIPLE BIRTHS BY AGE OF MOTHER, ALBERTA, 1957

Age of Mother (years)	Total Children Born	Single		Sets of twins			Sets of triplets			
		Liveborn	Stillborn	Both Liveborn	1 liveborn 1 stillborn	Both Stillborn	All Liveborn	2 liveborn 1 stillborn	1 liveborn 2 stillborn	All Stillborn
Total	36,103	34,948	362	368	19	2	5			
13 years	1	1								
14 years	12	12								
15 years	39	38	1							
16 years	228	221	3	2						
17 years	577	564	5	4						
18 years	1,003	972	13	9						
19 years	1,545	1,515	12	8	1					
20 years	1,879	1,843	12	12						
21 years	2,129	2,066	19	18	4					
22 years	2,365	2,308	16	18	1		1			
23 years	2,461	2,401	17	19	1		1			
24 years	2,439	2,361	24	25	2					
25 years	2,394	2,317	18	26		2				
26 years	2,193	2,120	23	21	1		2			
27 years	2,014	1,965	13	18						
28 years	1,906	1,849	19	17						
29 years	1,701	1,644	15	20	1					
30 years	1,556	1,503	17	16	2					
31 years	1,459	1,396	17	21	2					
32 years	1,291	1,242	15	17						
33 years	1,184	1,141	15	14						
34 years	1,065	1,022	15	13	1					
35 years	999	963	10	12	1					
36 years	843	804	9	15						
37 years	724	683	9	16						
38 years	563	539	8	8						
39 years	478	446	12	10						
40 years	310	295	5	5						
41 years	233	223	6	2						
42 years	203	196	5	1						
43 years	149	145	2	1						
44 years	81	76	5							
45 years	34	34								
46 years	10	10								
47 years	11	11								
48 years	4	4								
49 years	2	1	1							
50 and over										
Not stated	18	17	1							

TABLE 36: MARRIAGES BY MONTH OF MARRIAGE, 1957, ALBERTA

January	401
February	502
March	509
April	750
May	801
June	1,417
July	1,039
August	1,294
September	816
October	889
November	969
December	730
Total	10,117

TABLE 37 — MARRIAGES—AGES OF BRIDE BY AGE OF GROOM, ALBERTA, 1957

Age of Bridegroom	AGE OF BRIDE																Total Bridegrooms																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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	Under 16	16 years	17 years	18 years	19 years	20 years	21 years	22 years	23 years	24 years	25 years	26 years	27 years	28 years	29 years	30 years		31 years	32 years	33 years	34 years	35 years	36 years	37 years	38 years	39 years	40 years	41 years	42 years	43 years	44 years	45 years	46 years	47 years	48 years	49 years	50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75 and over	Not stated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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TABLE 38: MARRIAGES, MARITAL STATUS OF BRIDEGROOM BY STATUS OF BRIDE, 1957, ALBERTA

	Total Marriages	MARRIAGES BETWEEN								
		Bachelors and			Widowers and			Divorced Men and		
		Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women
Alberta	10,117	8,655	229	358	106	187	45	348	63	126

TABLE 39: MARRIAGES, MARITAL STATUS BY AGE OF BRIDEGROOM, 1957, ALBERTA

AGES	MARITAL STATUS			
	Total	Bachelors	Widowers	Divorced Men
Under 20 years	582	582	.....	.....
20-24 years	4,581	4,559	.....	22
25-29 years	2,810	2,676	12	122
30-34 years	952	823	15	114
35-39 years	418	314	10	94
40-44 years	234	126	31	77
45-49 years	160	64	37	59
50-54 years	117	45	43	29
55-59 years	78	19	49	10
60-64 years	48	13	33	2
65-69 years	70	9	56	5
70-74 years	38	5	31	2
75 +	27	5	21	1
Not stated	2	2	.....	.....
Total	10,117	9,242	338	537

TABLE 40: MARRIAGES, MARITAL STATUS BY AGE OF BRIDE, 1957, ALBERTA

AGES	MARITAL STATUS			
	Total	Spinsters	Widows	Divorced Women
Under 20 years	3,407	3,402	1	4
20-24 years	4,035	3,957	14	64
25-29 years	1,264	1,086	38	140
30-34 years	576	400	48	128
35-39 years	268	124	69	75
40-44 years	179	71	47	61
45-49 years	139	38	69	32
50-54 years	75	15	49	11
55-59 years	67	10	48	9
60-64 years	37	2	31	4
65-69 years	40	2	38	.....
70-74 years	20	.....	19	1
75 +	8	.....	8	.....
Not stated	2	2	.....	.....
Total	10,117	9,109	479	529

TABLE 41 — MARRIAGES, BIRTHPLACE OF GROOM BY BIRTHPLACE OF BRIDE, ALBERTA, 1957

BIRTHPLACE OF GROOM	BIRTHPLACE OF BRIDE															United States	Asia	Europe	British Isles and Possessions	Other	Unspecified
	CANADA																				
	Total Grooms																				
		Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories	Province Unspecified							
Canada	7,991	4	6	37	23	55	210	212	1079	5712	199	1	8		190	175	5				
Newfoundland	10			1			1		2	5						1					
Prince Edward Island	22		2				3		11	46						3					
Nova Scotia	88			10	1	2	7	2	11	27						2					
New Brunswick	93					1	2		5	12						1					
Quebec	111	1			3	12	5		5	61						1					
Ontario	394		1	6	3	8	54	15	62	228						4					
Manitoba	450				4	1	12	34	53	218						19	17				
Saskatchewan	1239			1	4	2	37	39	339	768		1				30	18				
Alberta	371		3	15	8	25	80	109	553	4181						101	123				
British Columbia	5,354	1				4	9	8	38	165						4	5				
Yukon	255			1					1	2							1				
Northwest Territories	1																				
Province unspecified	3																				
British Isles & Possessions	400			4	1	2	17	18	44	159						108	24				
Europe	254			3	2	7	19	18	60	346						25	882				
Asia	80						1			6						3	6				
United States	247			2	1	3	10	8	14	126						13	11				
Other	14						1		3	6							1				
Unspecified	1									1											
Total	10,117	4	6	46	27	67	258	256	1200	6356	216	1	8		339	1098	73	153		9	

TABLE 42 — MARRIAGES—RELIGIOUS DENOMINATION OF GROOM BY RELIGIOUS DENOMINATION OF BRIDE, ALBERTA, 1957 (Continued)

[illegible]

TABLE 42 — MARRIAGES—RELIGIOUS DENOMINATION OF GROOM BY RELIGIOUS DENOMINATION OF BRIDE, ALBERTA, 1957 (Continued)

RELIGIOUS DENOMINATION OF GROOM		RELIGIOUS DENOMINATION OF BRIDE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		Total Grooms	11 Adventists	10 Anglicans	51 Apostolic bodies	20 Baptists	12 Brethren including United	52 Christadelphians	13 Christians	53 Christian Missionary Alliance	14 Christian Scientists	15 Churches of Christ (Disciples)	54 Church of God	94 Doukhobors	40 Eastern Orthodox Churches	17 Evangelicals	56 Gospel bodies	30 Greek Catholic Churches	57 Holiness Movement	18 International Bible Students	96 Jewish	60 Lutherans	95 Mennonites	22 Methodists	61 Moravian Church	23 Mormons	92 Non-denominational	31-35 Oriental religions	24 Pentecostal Assemblies	62 Plymouth Brethren	70 Presbyterians	63 Reform Churches (Christian)	80 Roman Catholics	25 Salvation Army	55 Society of Friends	64 Spiritualists	65 Swedenborgians	66 Unitarians	90 United Church of Canada	91 Other religions	98, 99 Non-religious denominations	99 Unspecified or unknown																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Methodists	31	1	5	3	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	113	2	113	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

TABLE 43: STILLBIRTHS BY SEX AND PERIOD OF GESTATION, 1957, ALBERTA

PERIOD OF GESTATION	Male	Female
28 weeks	11	8
29 weeks	4	5
30 weeks	11	12
31 weeks	3	7
32 weeks	3	12
33 weeks	2	8
34 weeks	15	11
35 weeks	10	8
36 weeks	19	18
37 weeks	12	15
38 weeks	24	20
39 weeks	15	17
40 weeks	31	37
41 weeks	6	4
42 weeks	7	7
43 weeks	3	2
44 weeks	1	2
45 weeks	1	....
46 weeks	1	....
47 weeks .....	....	....
48 weeks .....	....	....
49 weeks .....	....	....
Not stated	9	5
Total	187	198

TABLE 44: RATIO OF MALE TO FEMALE BIRTHS, AND OF BIRTHS TO DEATHS

Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths	Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths
1905	1.059	3.13	1931	1.075	3.25
1906	1.094	2.07	1932	1.052	3.08
1907	1.075	2.96	1933	1.053	3.01
1908	1.077	2.73	1934	1.032	3.04
1909	1.086	2.59	1935	1.055	2.81
1910	1.065	2.69	1936	1.049	2.57
1911	1.103	2.43	1937	1.019	2.38
1912	1.084	2.43	1938	1.046	2.70
1913	1.053	2.67	1939	1.046	2.85
1914	1.081	3.30	1940	1.033	2.79
1915	1.000	3.74	1941	1.054	2.71
1916	1.063	3.29	1942	1.058	3.02
1917	1.061	3.25	1943	1.041	2.96
1918	1.069	1.88	1944	1.060	3.06
1919	1.074	2.56	1945	1.061	3.08
1920	1.055	2.92	1946	1.036	3.36
1921	1.055	3.32	1947	1.061	3.76
1922	1.034	3.06	1948	1.049	3.44
1923	1.072	3.13	1949	1.051	3.52
1924	1.036	2.97	1950	1.052	3.74
1925	1.036	2.97	1951	1.039	3.76
1926	1.053	2.80	1952	1.058	3.95
1927	1.065	2.94	1953	1.063	4.10
1928	1.064	2.75	1954	1.073	4.60
1929	1.042	2.71	1955	1.066	4.31
1930	1.027	3.21	1956	1.060	4.48
			1957	1.055	4.32

BUREAU OF VITAL STATISTICS

TABLE 45: DIVORCES AND NULLITIES, BY JUDICIAL DISTRICTS,
FOR THE YEAR 1957, ALBERTA

JUDICIAL DISTRICTS	DIVORCES			NULLITIES		
	Number of Divorces	Granted to Husband	Granted to Wife	Number of Nullities	Granted to Husband	Granted to Wife
Edmonton	345	160	185	3	1	2
Calgary	310	124	186	4	1	3
Lethbridge	31	13	18	1	....	1
Medicine Hat	11	4	7	....	....	....
Peace River .....	....	....	....	....	....	....
Grande Prairie	7	4	3	....	....	....
Hanna	1	1	....	....	....	....
Red Deer	12	7	5	....	....	....
Drumheller	1	1	....	....	....	....
Fort MacLeod .....	....	....	....	....	....	....
Wetaskiwin	5	2	4	....	....	....
Vegreville	2	1	1	....	....	....
Total	726	317	409	8	2	6

DIVORCES AND NULLITIES IN ALBERTA SINCE THE PASSING OF THE ACT

YEAR	Granted to Husband	Granted to Wife	Total
1919	3	3	6
1920	74	26	100
1921	53	37	90
1922	80	49	129
1923	57	32	89
1924	66	53	119
1925	59	42	101
1926	79	75	154
1927	83	66	149
1928	91	84	175
1929	77	71	148
1930	64	87	151
1931	69	87	156
1932	68	81	149
1933	56	79	135
1934	62	106	168
1935	74	135	209
1936	74	135	209
1937	102	139	241
1938	105	162	267
1939	104	163	267
1940	119	154	273
1941	135	176	311
1942	179	201	380
1943	190	223	413
1944	245	243	488
1945	302	273	575
1946	494	480	974
1947	404	478	882
1948	302	357	659
1949	262	332	594
1950	249	311	550
1951	255	334	589
1952	239	391	630
1953	228	375	603
1954	224	384	608
1955	233	394	627
1956	278	410	688
1957	317	409	726

TABLE 46 — POPULATION, BIRTHS, MARRIAGES, DEATHS, AND RATES FOR THE YEARS 1905-1957

ANNUAL REPORT, 1957

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Year	Population	Number of Births	Birth Rate	No. of Births Received to Date	Number of Marriages	Marriage Rate	Number of Deaths	Death Rate	Infantile Death Rate per 1,000 Births	Puerperal Death Rate per 1,000 Births	Natural Increase
1905	185,000	421	20.41	4,204	187	6.77	114	7.36	90.00	.....	13.04
1906	186,000	3,003	20.45	4,887	927	6.77	1,091	6.68	100.27	.....	13.36
1907	226,000	4,792	20.95	7,104	1,907	7.63	1,578	8.22	126.57	6.33	14.22
1908	266,000	5,793	22.45	7,714	2,032	7.63	2,188	8.22	.....	6.02	14.07
1909	301,000	6,897	22.91	8,184	2,384	7.92	2,662	8.81	.....	.....	14.00
1910	336,000	8,321	24.49	9,713	3,086	9.18	3,526	10.49	129.49	8.63	14.07
1911	374,000	8,813	23.56	11,041	3,360	9.70	3,618	9.67	134.46	9.75	13.88
1912	400,000	10,284	25.71	12,920	3,630	11.07	4,229	10.58	124.75	9.75	15.13
1913	423,000	11,871	28.47	15,020	4,429	10.63	4,432	10.58	120.47	7.07	17.84
1914	459,000	13,685	30.75	16,599	5,053	10.39	4,417	9.32	100.54	6.13	21.43
1915	480,000	13,452	28.90	17,067	4,623	9.06	3,588	7.73	87.9	5.79	21.26
1916	496,000	13,331	27.87	15,743	4,202	8.53	3,588	8.18	90.5	7.20	18.69
1917	508,000	13,576	27.01	16,803	4,270	8.54	4,047	8.09	107.30	6.48	18.82
1918	522,000	14,890	28.72	16,906	4,048	6.98	4,924	13.86	107.10	6.31	11.86
1919	522,000	14,130	27.25	16,344	4,118	6.98	5,307	10.18	103.10	8.33	17.57
1920	565,000	16,965	26.72	18,991	5,160	7.94	2,490	8.39	83.70	7.24	19.50
1921	588,000	16,414	26.44	18,383	4,772	6.99	5,281	8.62	91.93	6.68	17.83
1922	592,000	16,163	26.44	17,302	4,177	6.99	4,843	8.06	90.54	5.50	18.75
1923	595,000	15,558	25.75	19,440	4,160	7.57	4,907	8.30	82.40	6.18	16.42
1924	595,000	15,558	25.75	19,440	4,160	7.57	4,907	8.30	82.40	6.18	16.42
1925	602,000	15,014	25.02	15,890	4,363	7.86	4,717	7.86	79.90	5.82	15.31
1926	608,000	14,455	23.93	15,499	4,498	7.58	5,156	8.49	81.63	5.82	15.31
1927	623,000	14,897	24.79	16,661	4,707	7.58	5,059	8.16	74.51	6.38	15.87
1928	658,000	15,692	24.79	16,575	5,776	9.12	5,699	9.00	76.50	6.75	15.79
1929	684,000	16,924	26.19	17,751	6,004	9.29	6,239	9.65	77.40	7.26	16.54
1930	708,000	17,649	26.74	18,511	5,334	8.08	5,396	8.33	63.57	6.46	18.41
1931	732,000	17,252	23.74	18,180	5,142	7.02	5,302	7.46	69.38	5.04	16.32
1932	740,000	16,980	22.96	18,868	5,054	6.83	5,521	7.07	58.68	3.76	15.50
1933	748,000	16,123	21.33	17,012	5,389	7.10	5,346	7.07	59.90	4.43	14.24
1934	756,000	16,236	21.33	17,094	6,053	7.87	5,337	6.93	54.89	4.99	14.01
1935	770,000	16,183	21.0	17,040	6,010	7.7	5,729	7.3	57.8	4.2	14.0
1936	772,782	15,786	20.4	16,494	6,020	7.8	6,147	8.0	60.0	3.8	14.0
1937	778,000	15,903	20.4	16,553	6,345	8.2	6,261	8.0	63.0	4.3	14.0
1938	783,000	15,891	20.3	16,521	6,973	8.9	5,781	7.3	51.0	4.3	12.8
1939	789,000	16,470	20.9	16,939	7,589	9.6	5,789	7.3	48.0	3.5	13.6
1940	796,169	17,359	21.8	17,743	8,582	11.0	6,203	7.8	48.0	3.9	13.6
1941	806,169	18,317	22.7	18,571	8,470	10.7	6,385	8.0	51.0	3.6	13.7
1942	816,169	18,317	22.7	18,571	9,034	11.2	6,091	7.5	38.0	2.3	15.2
1943	826,000	19,290	23.3	19,499	7,771	9.8	6,345	7.6	30.0	0.5	22.4
1944	838,000	19,373	23.7	19,491	7,299	8.9	6,345	8.2	42.0	2.7	16.1
1945	826,000	19,939	24.1	20,072	7,310	8.8	6,320	7.7	46.0	1.6	16.1
1946	803,330	22,184	27.6	22,295	7,310	11.8	6,454	7.8	43.0	2.4	16.2
1947	822,000	24,631	30.0	24,708	8,797	10.7	6,541	8.0	42.5	1.4	19.3
1948	846,000	24,075	28.5	24,078	8,844	10.5	6,543	8.2	37.0	0.9	22.0
1949	871,000	24,935	28.7	24,975	9,037	10.4	6,987	8.0	39.0	1.2	20.2
1950	895,000	25,625	28.7	25,681	9,294	10.4	7,083	8.2	33.0	1.0	20.5
1951	939,501	27,003	28.7	27,044	9,305	9.9	6,856	7.7	32.0	0.7	21.0
1952	970,000	29,105	30.0	29,048	9,514	9.8	7,646	7.6	30.0	0.7	23.7
1953	1,002,000	31,376	31.3	31,355	10,126	10.1	7,167	7.6	30.0	0.6	22.1
1954	1,039,000	33,593	32.3	33,640	9,960	9.6	7,520	7.2	26.0	0.3	22.3
1955	1,066,000	34,357	32.2	34,364	9,844	9.2	7,956	7.5	26.0	0.4	23.1
1956	1,123,116	34,951	31.1	34,960	9,965	8.9	7,786	6.9	23.0	0.4	24.2
1957	1,160,000	35,719	30.8	35,725	10,117	8.7	8,255	7.1	27.0	0.3	23.7

